

FIGURE 1

TM-020 Mode Cavity with Inner Cylinder

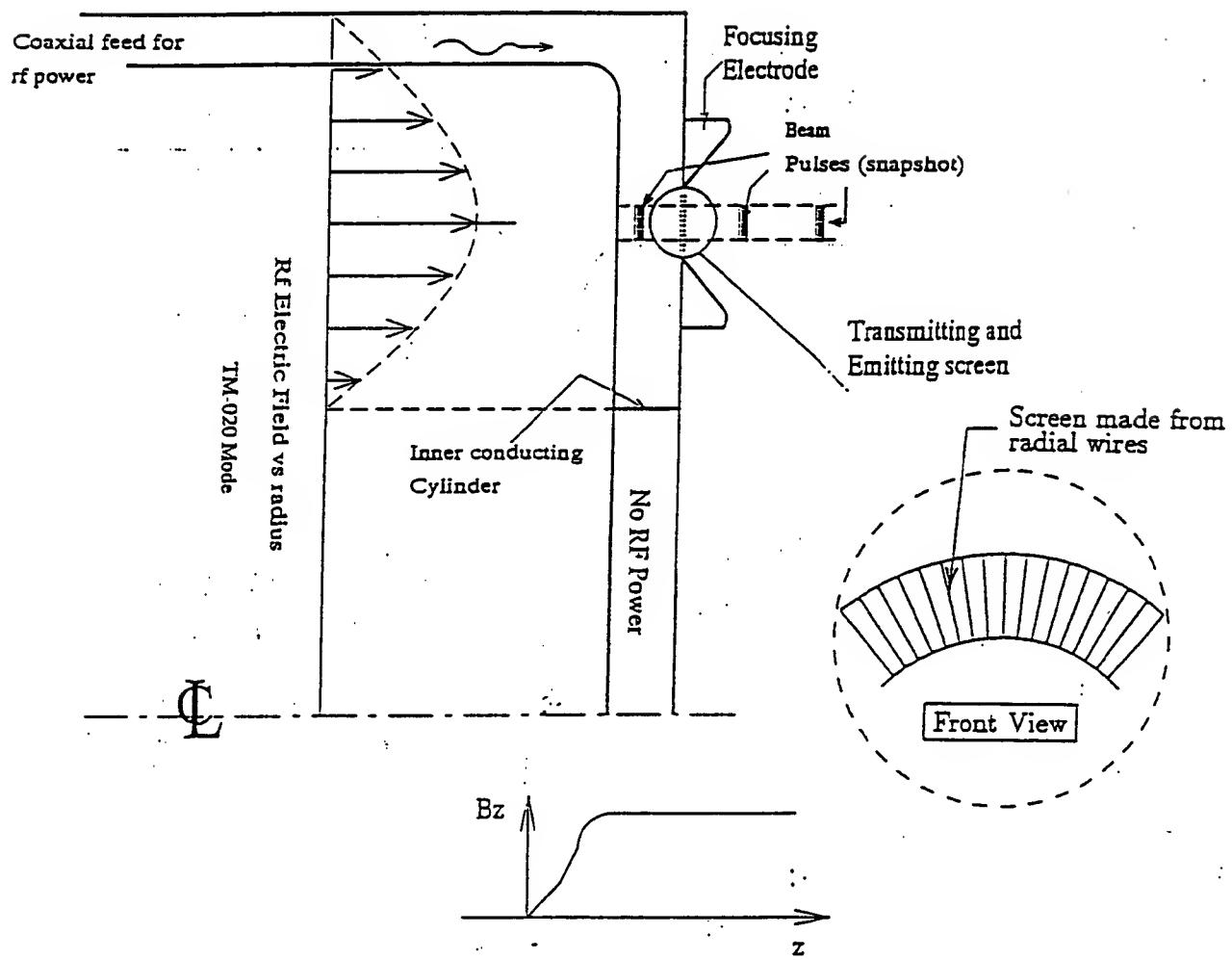


FIGURE 2

OSCILLATING MEANS
22

OSCILLATING B FIELD
means 28

RF cavity
(side view)

10

✓

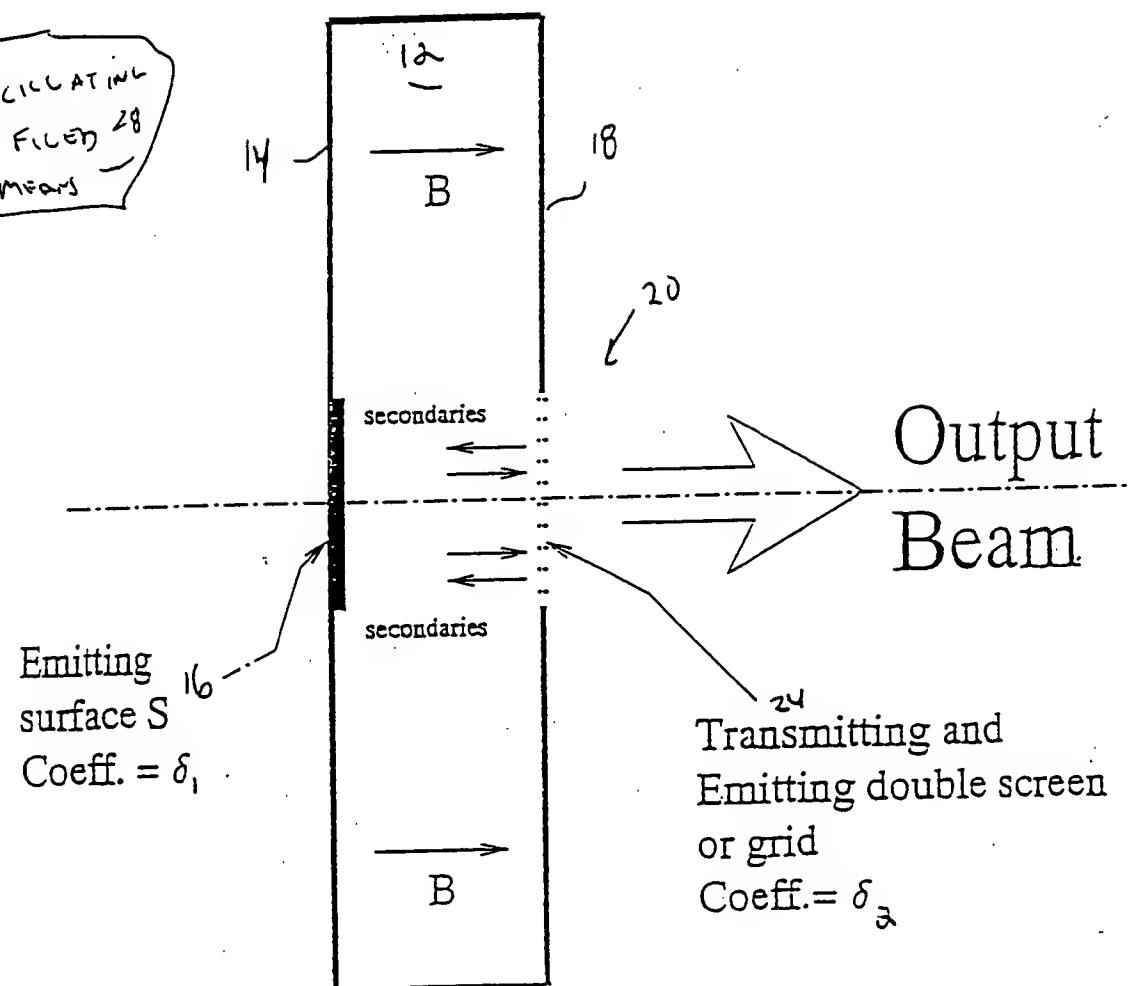


FIGURE 3

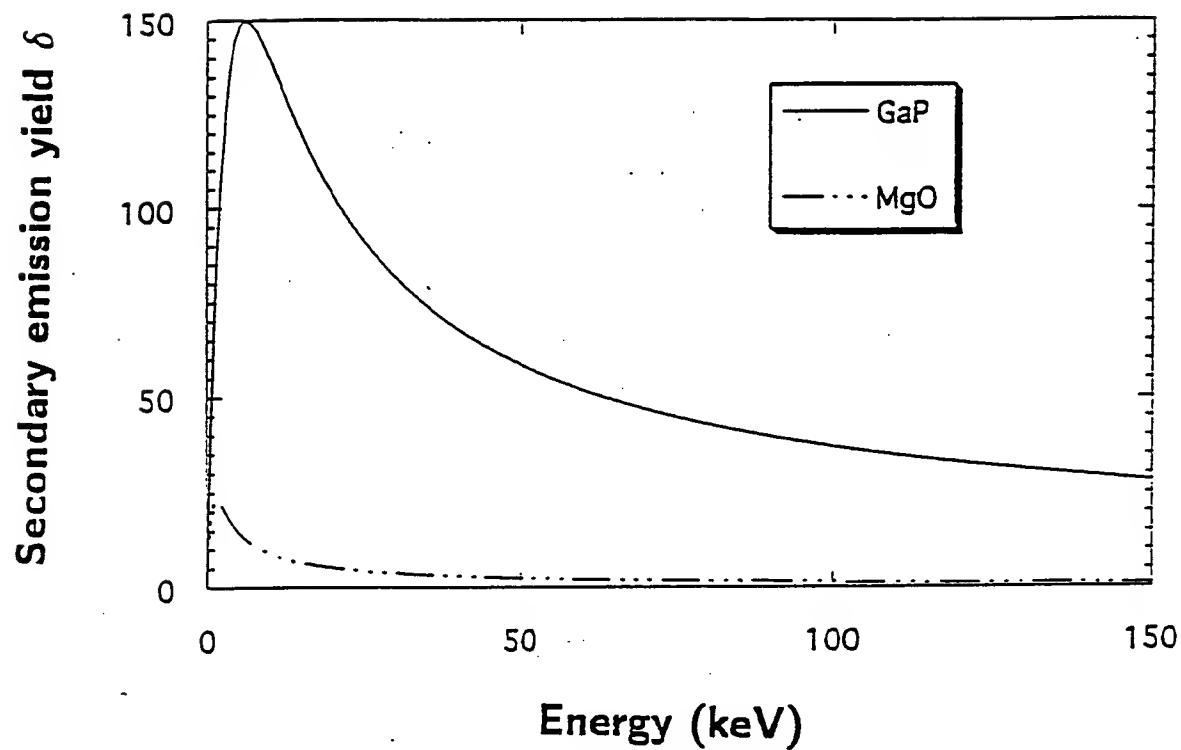


FIGURE 4

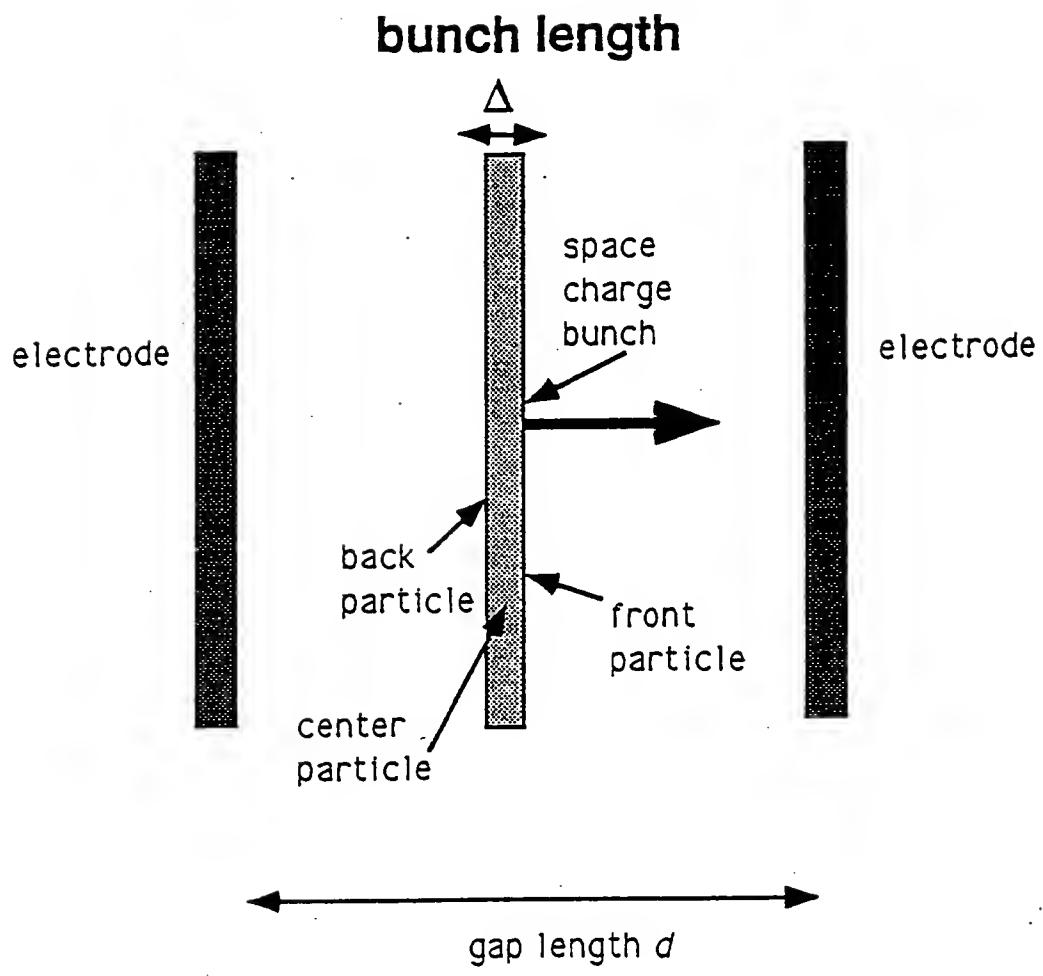


FIGURE 5

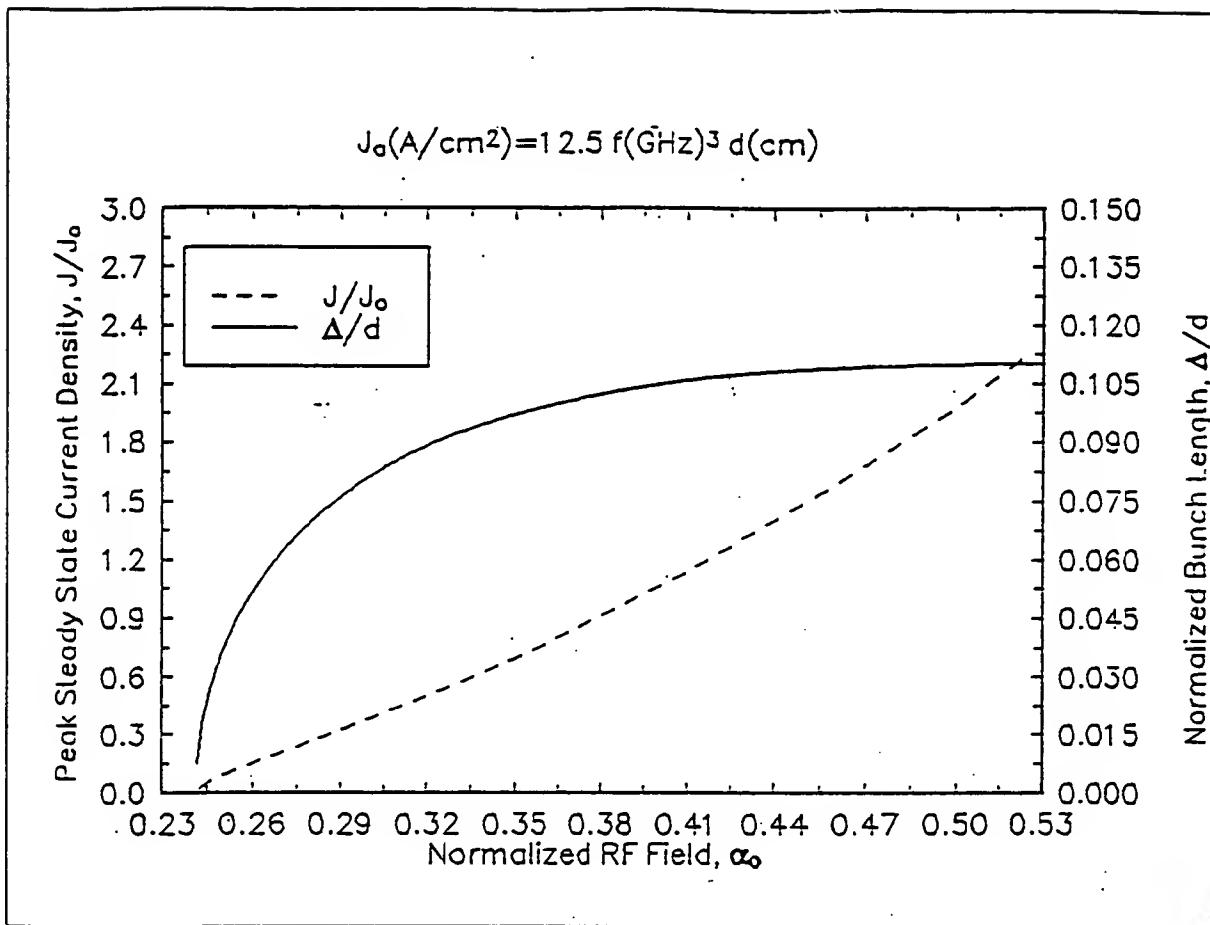


FIGURE 6

Resonant & Kilpatrick Electric Field vs Frequency
Resonant Electric is given at different gap spacings

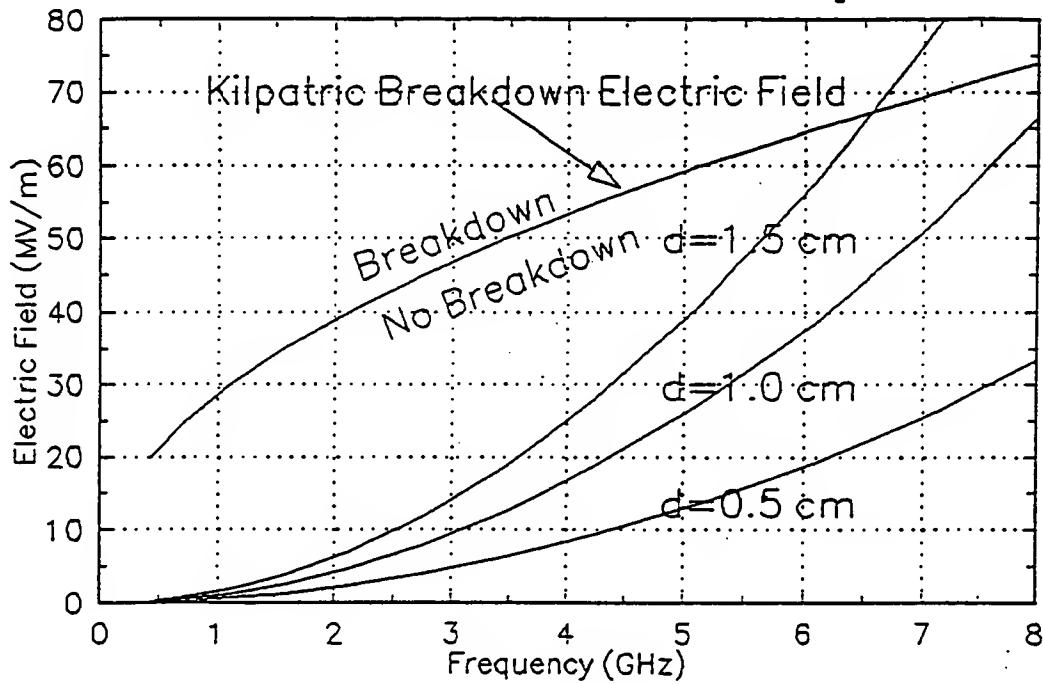


FIGURE 7

1.3 GHz, xy plot

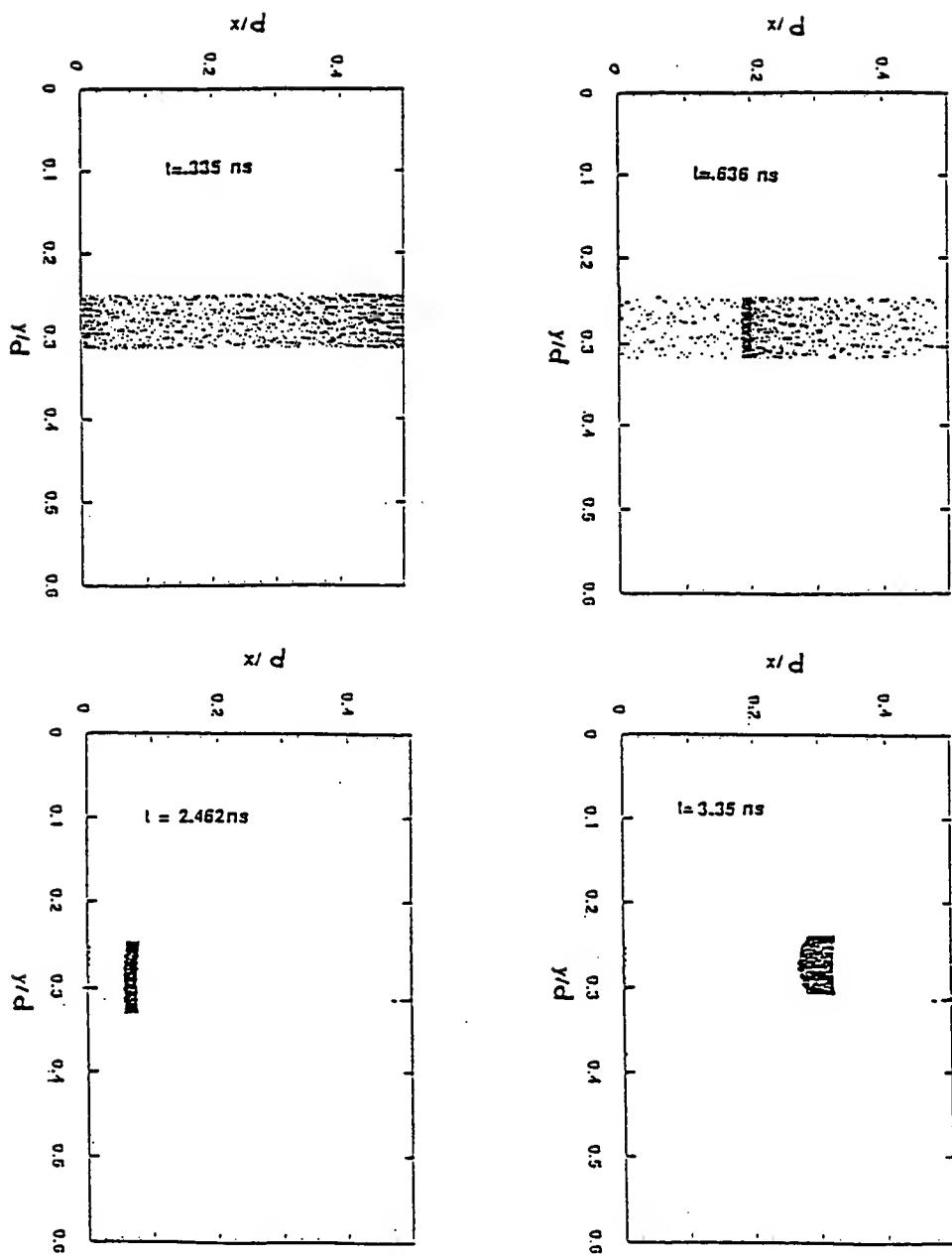


FIGURE 8

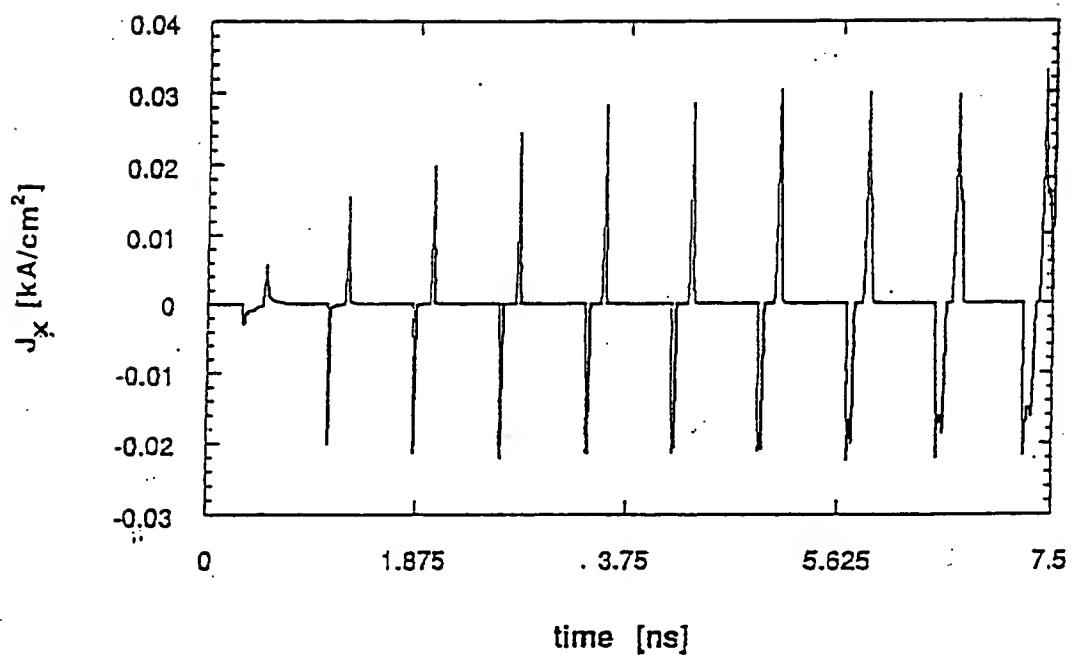


FIGURE 9

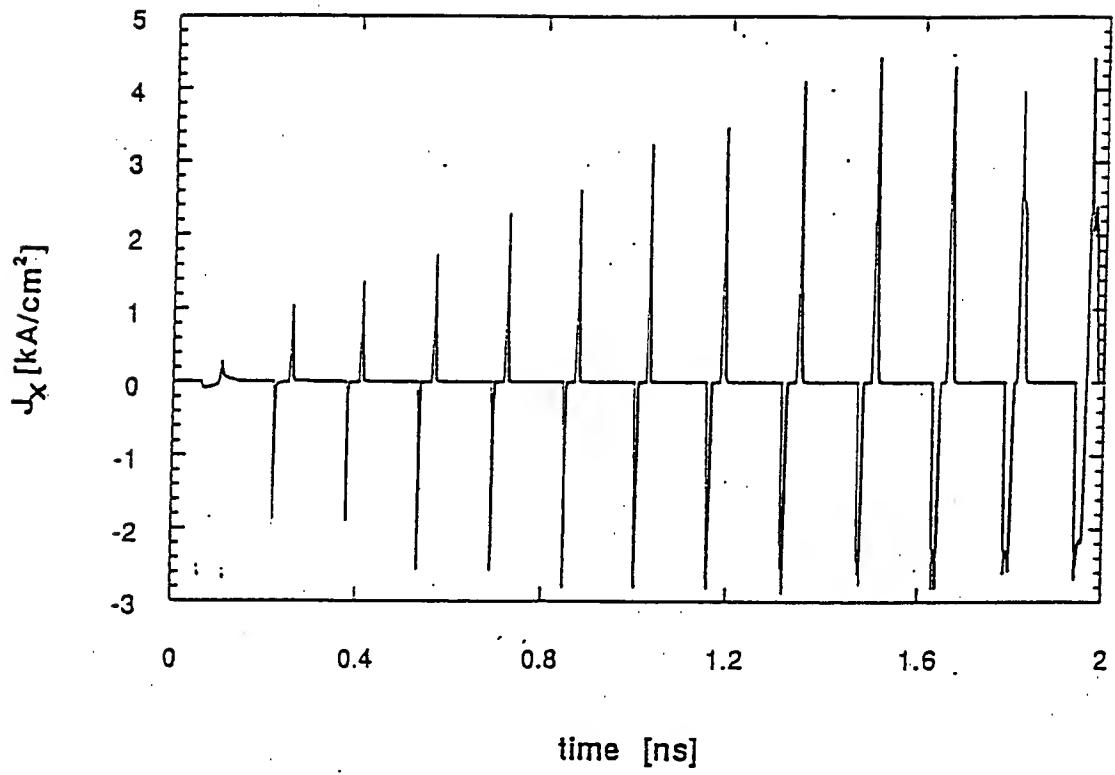


FIGURE 10

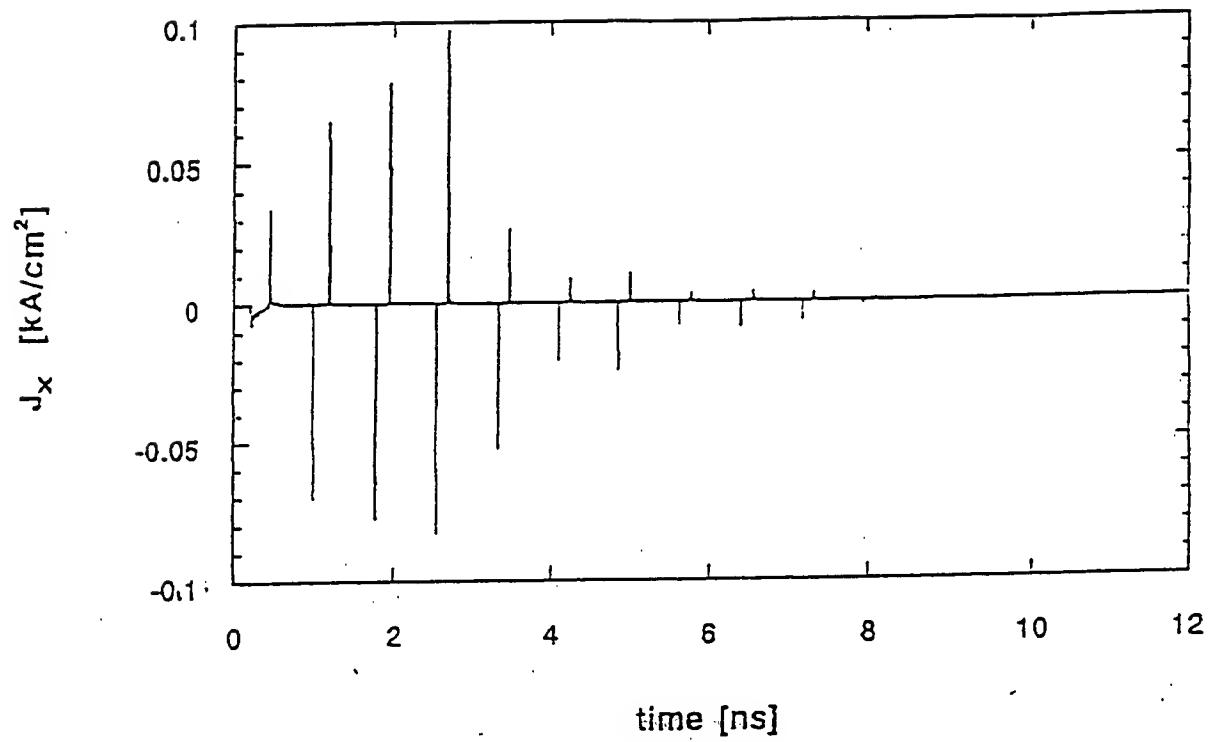


FIGURE 11

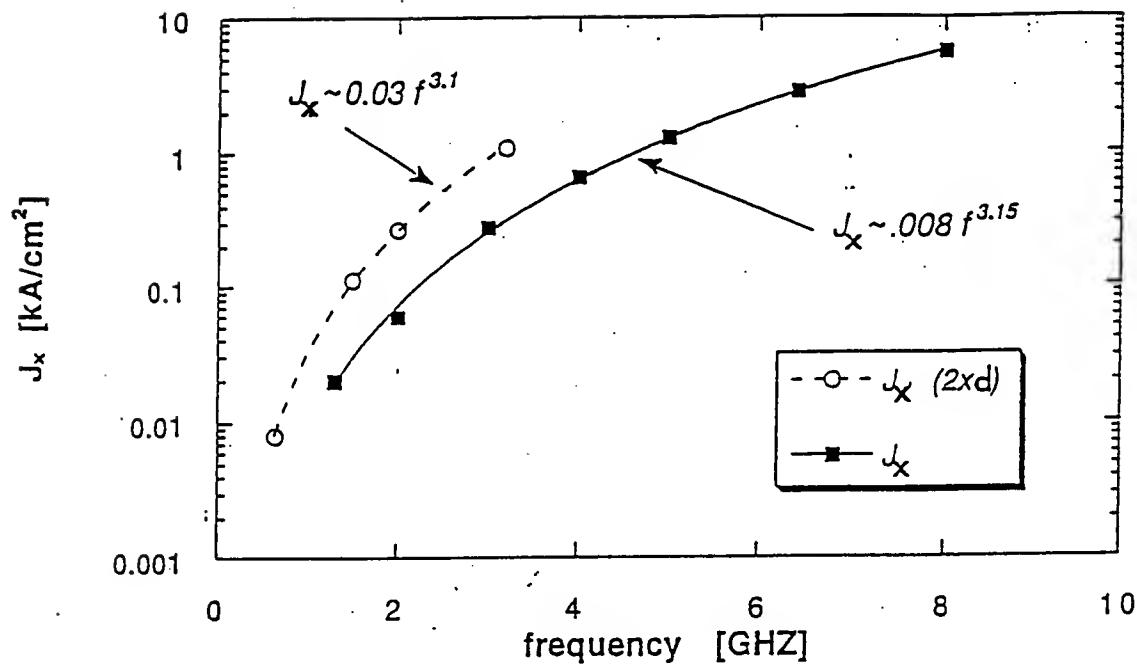


FIGURE 12

Micro-Pulse Duration vs Frequency

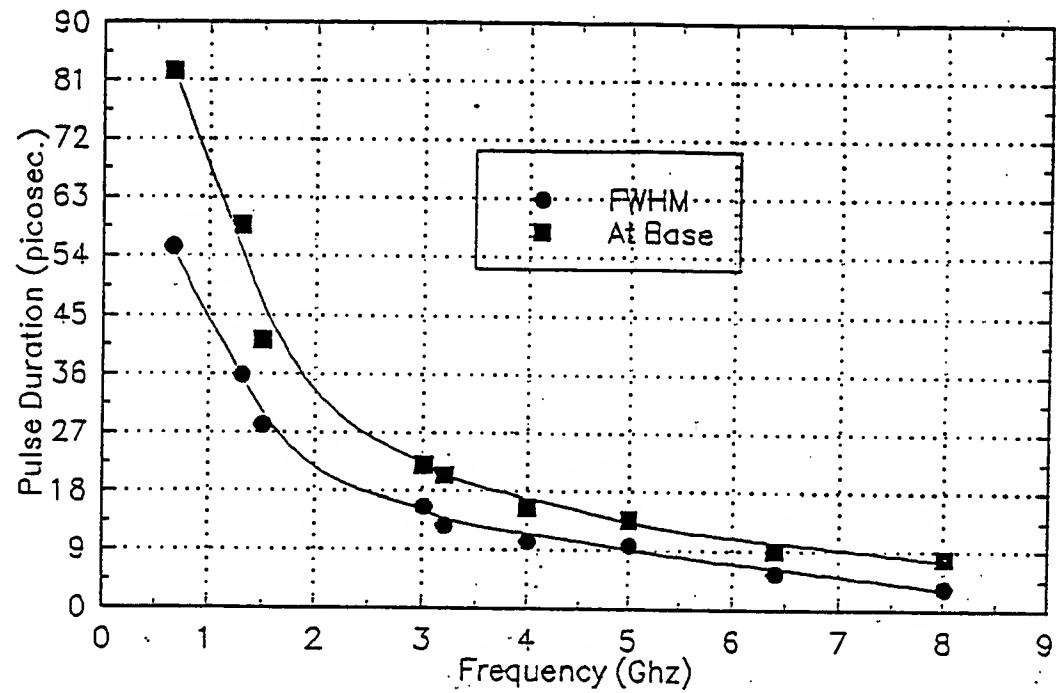


FIGURE 13

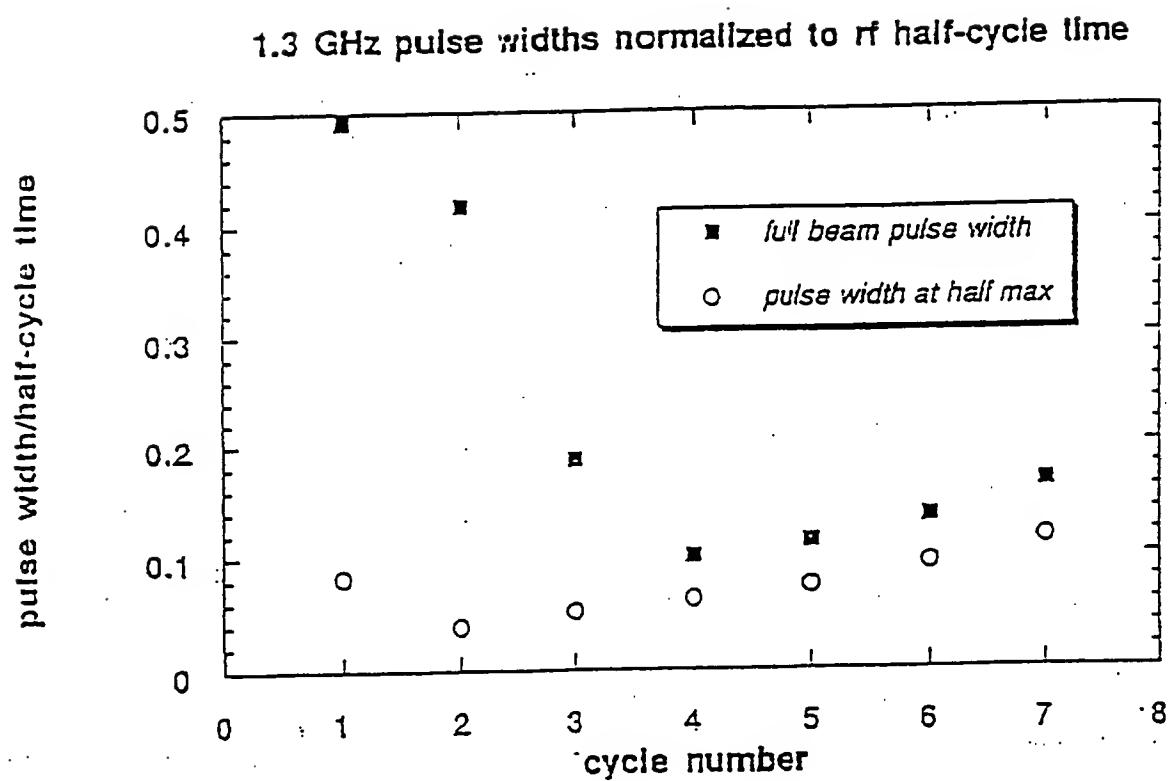


FIGURE 14

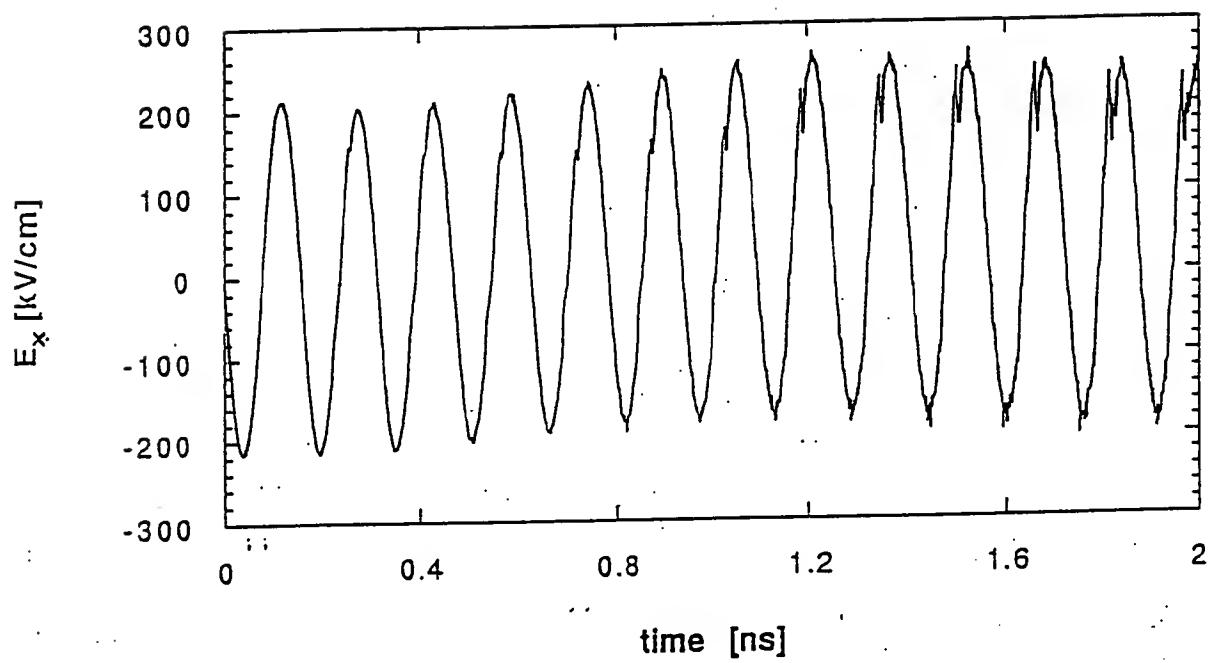


FIGURE 15

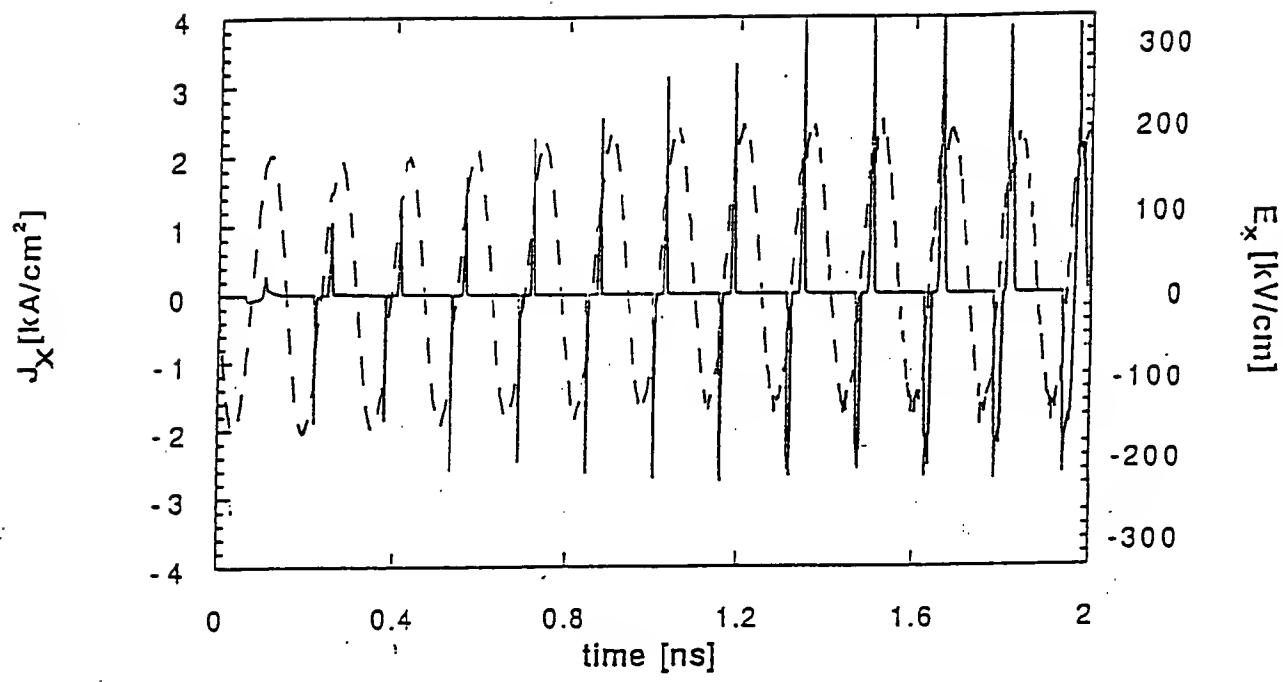


FIGURE 16

Comparison of Theory and Simulation
cavity gap=d= 0.5 cm, J_o (A/cm²)=12.5 f(GHz)³ d(cm)

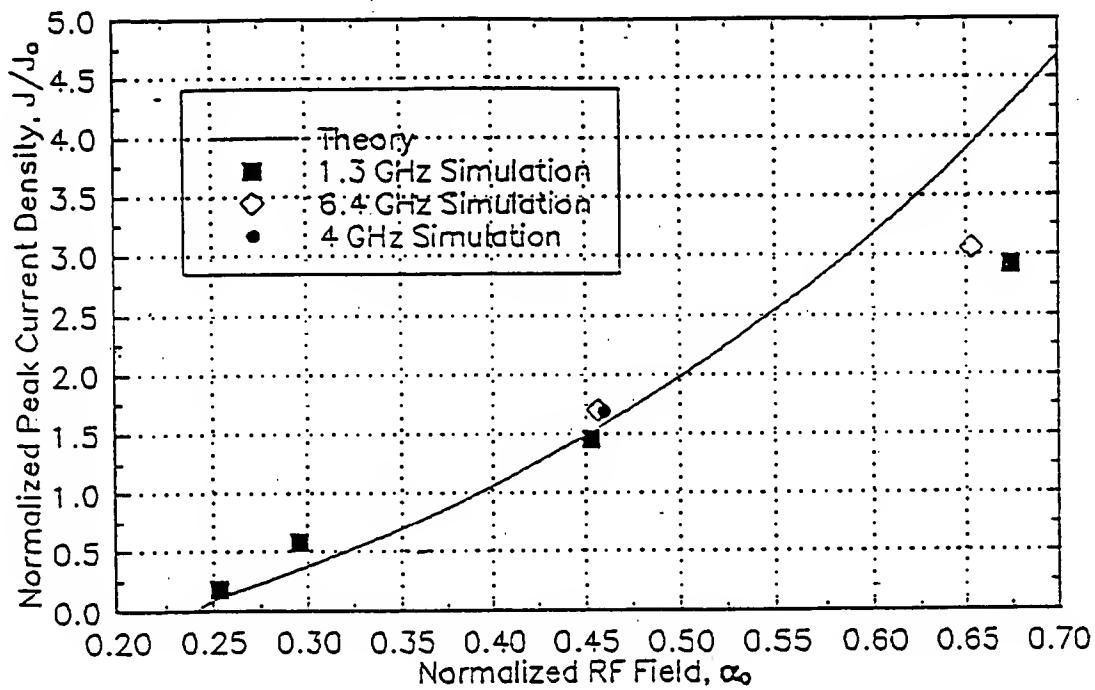


FIGURE 17

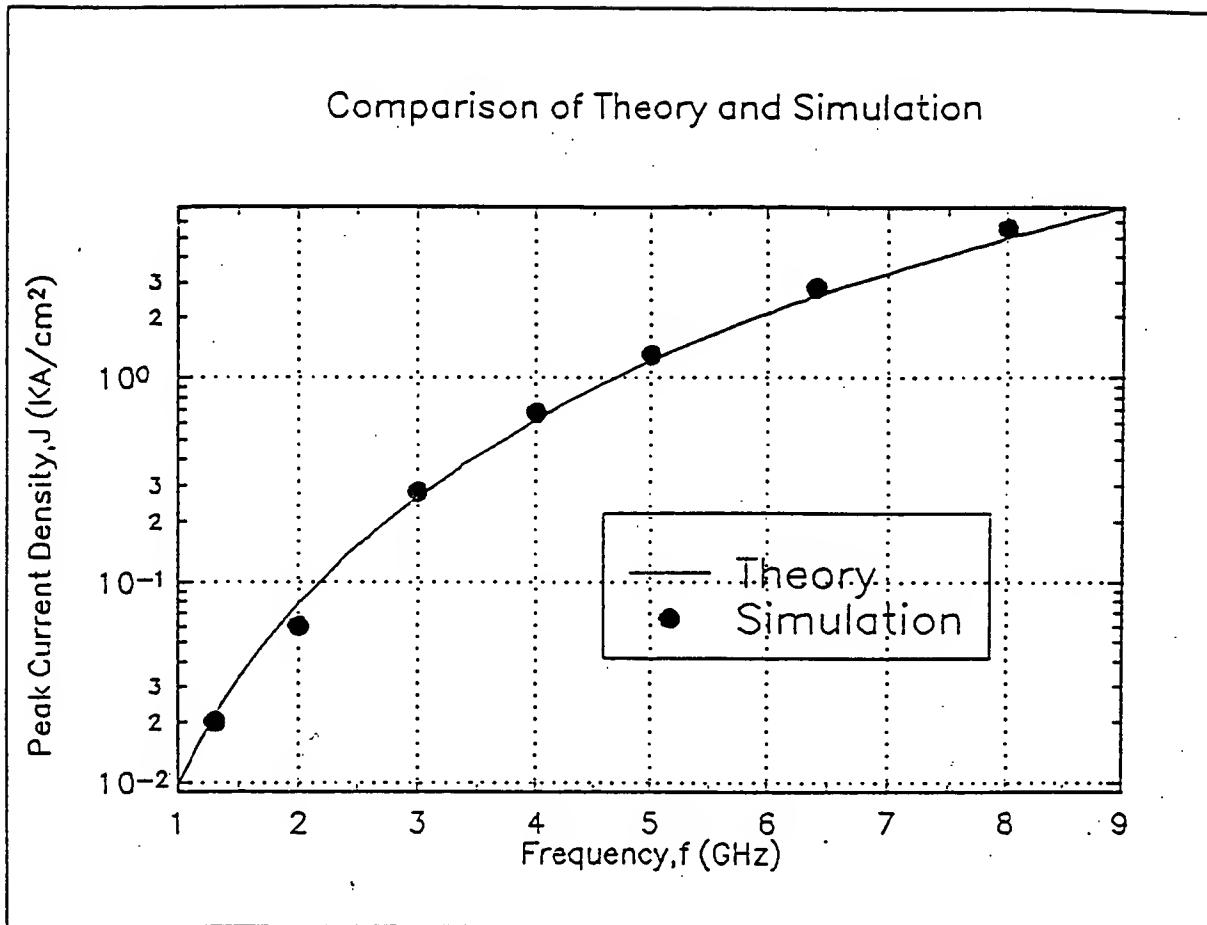


FIGURE 18

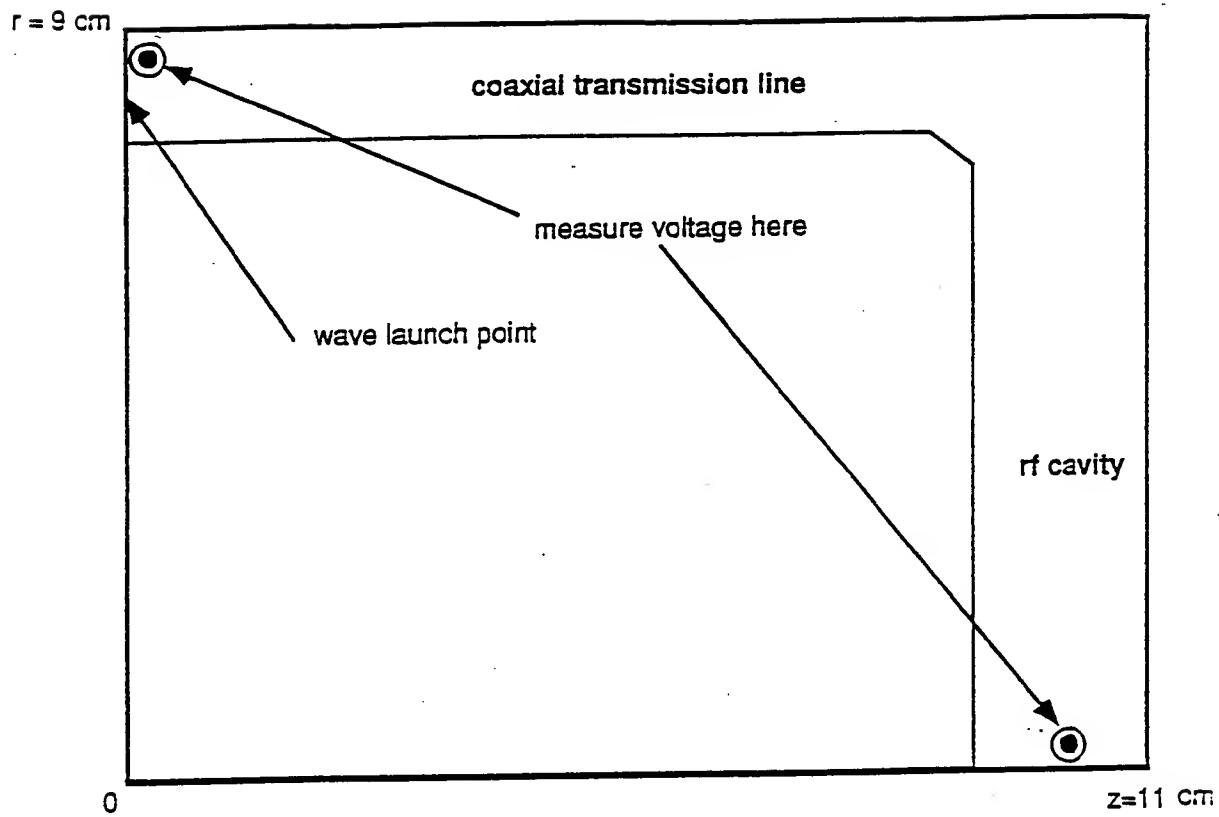


FIGURE 19

00000000000000000000000000000000

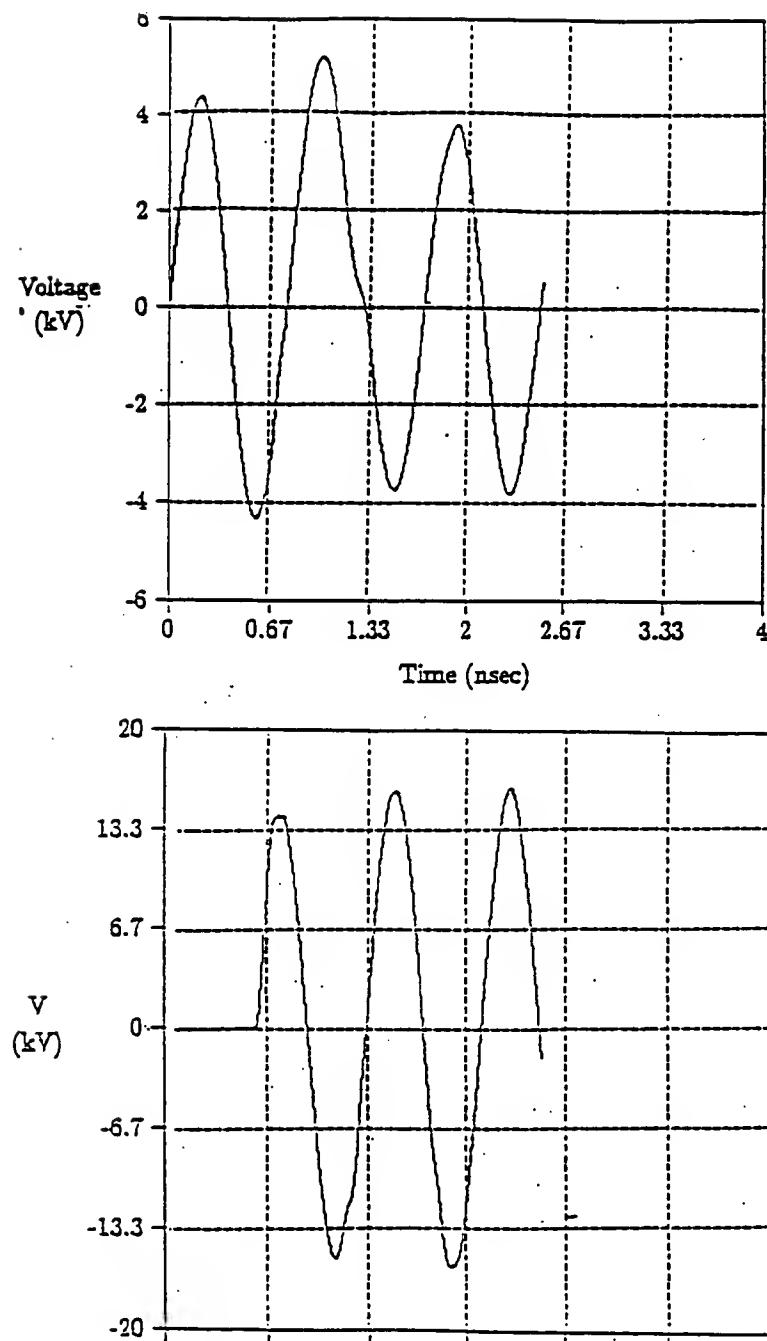


FIGURE 20

Electric Field vs Radius for an Ideal and a Coaxially Fed Cavity
 TM_{010} mode at 1.275 GHz, Cavity Gap=1 cm, Coaxial Gap= 1 cm

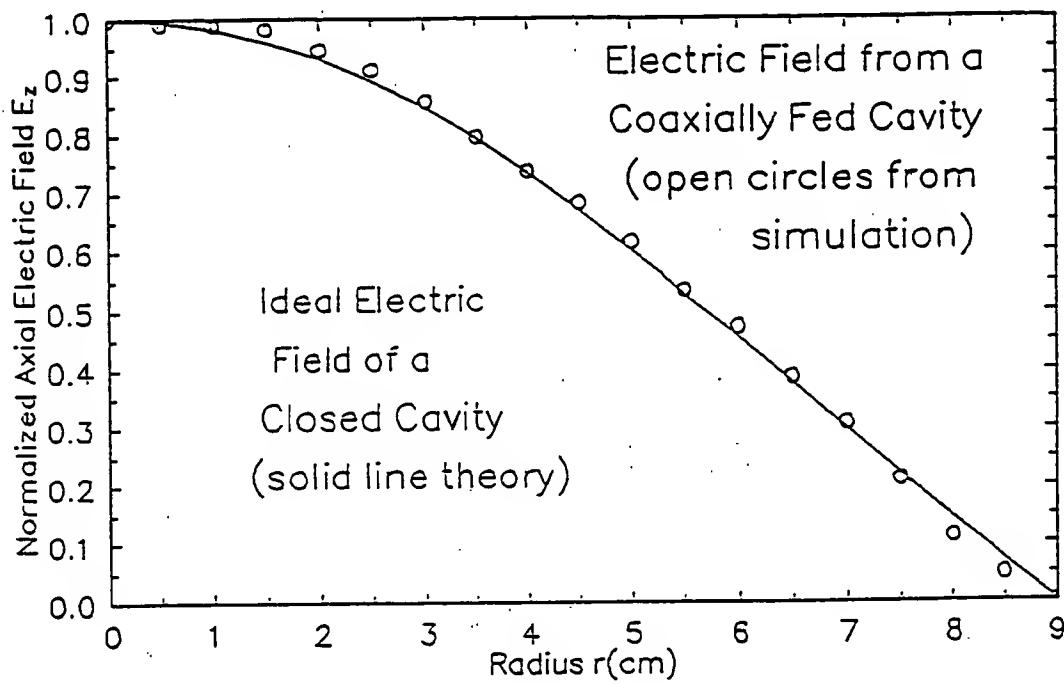


FIGURE 21

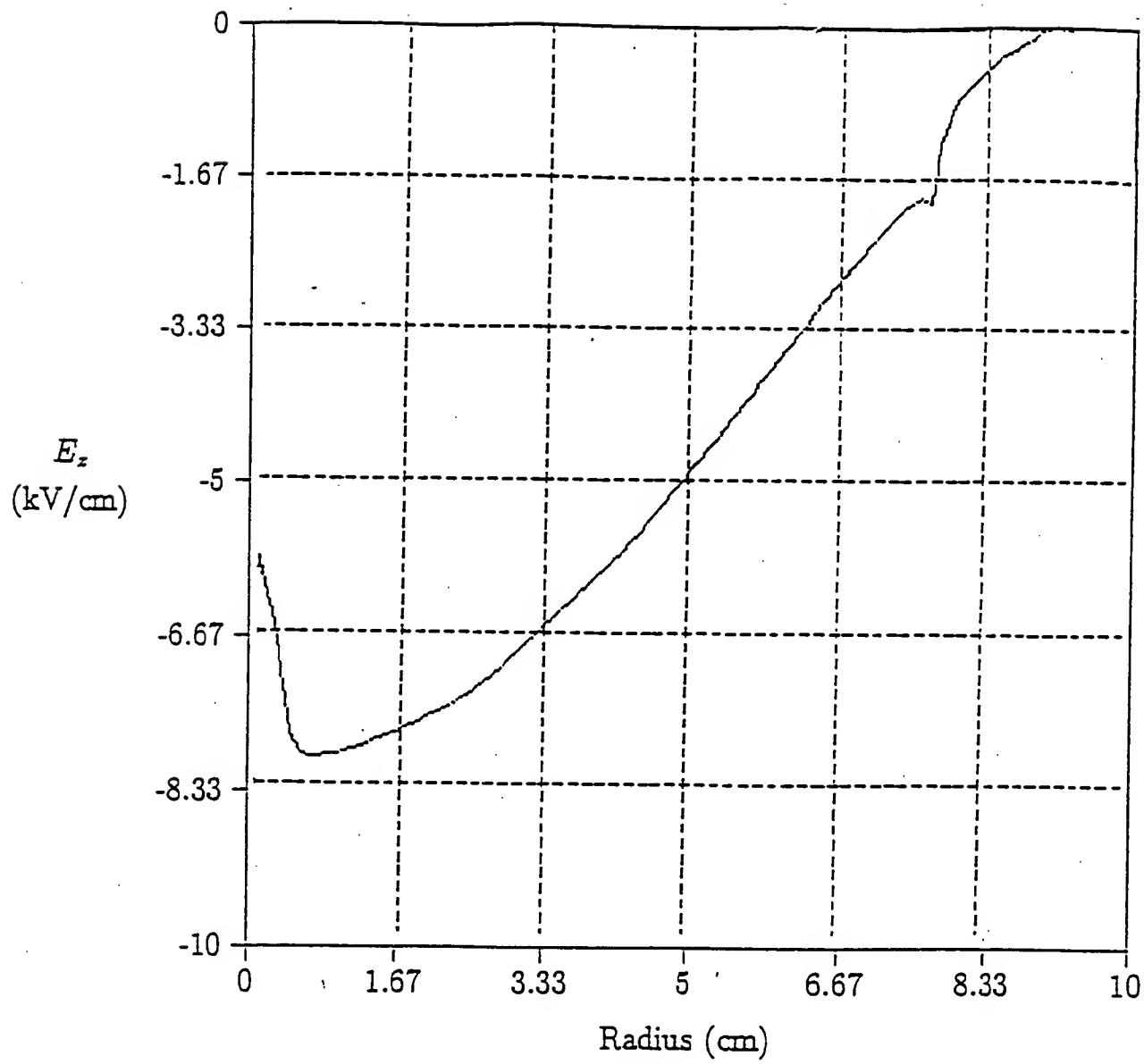


FIGURE 22

Electric Field vs Radius for an Ideal and a Coaxially Fed Cavity
 TM_{020} mode at 1.275 GHz, Cavity Gap=1 cm, Coaxial Gap= 1 cm

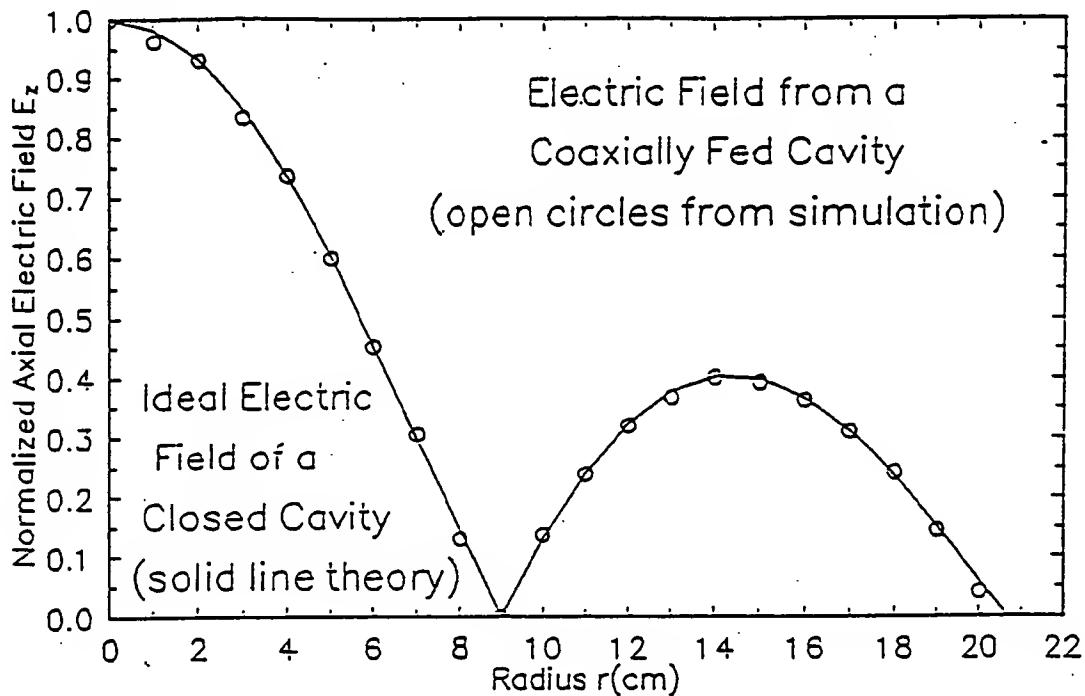


FIGURE 23

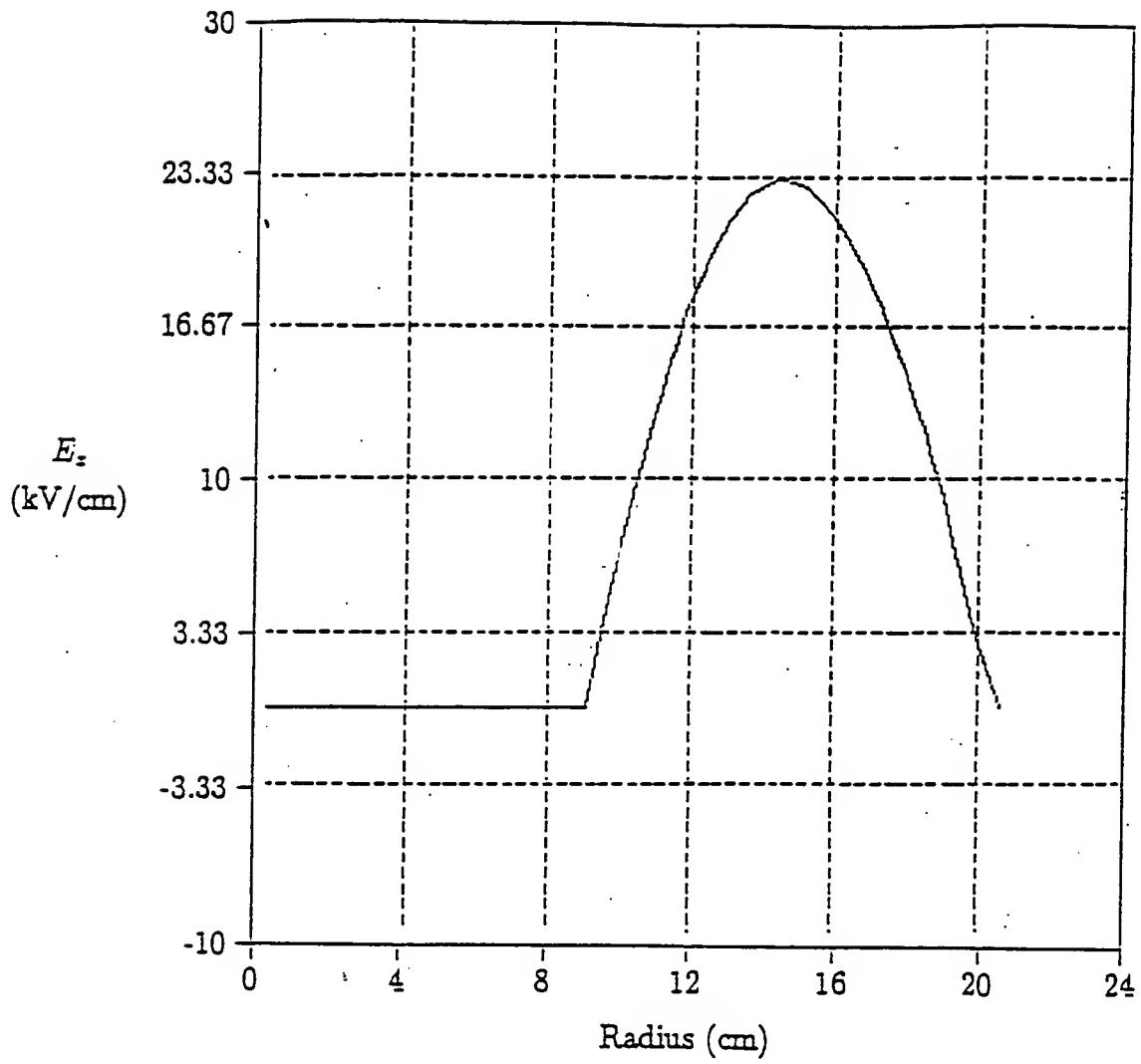


FIGURE 24

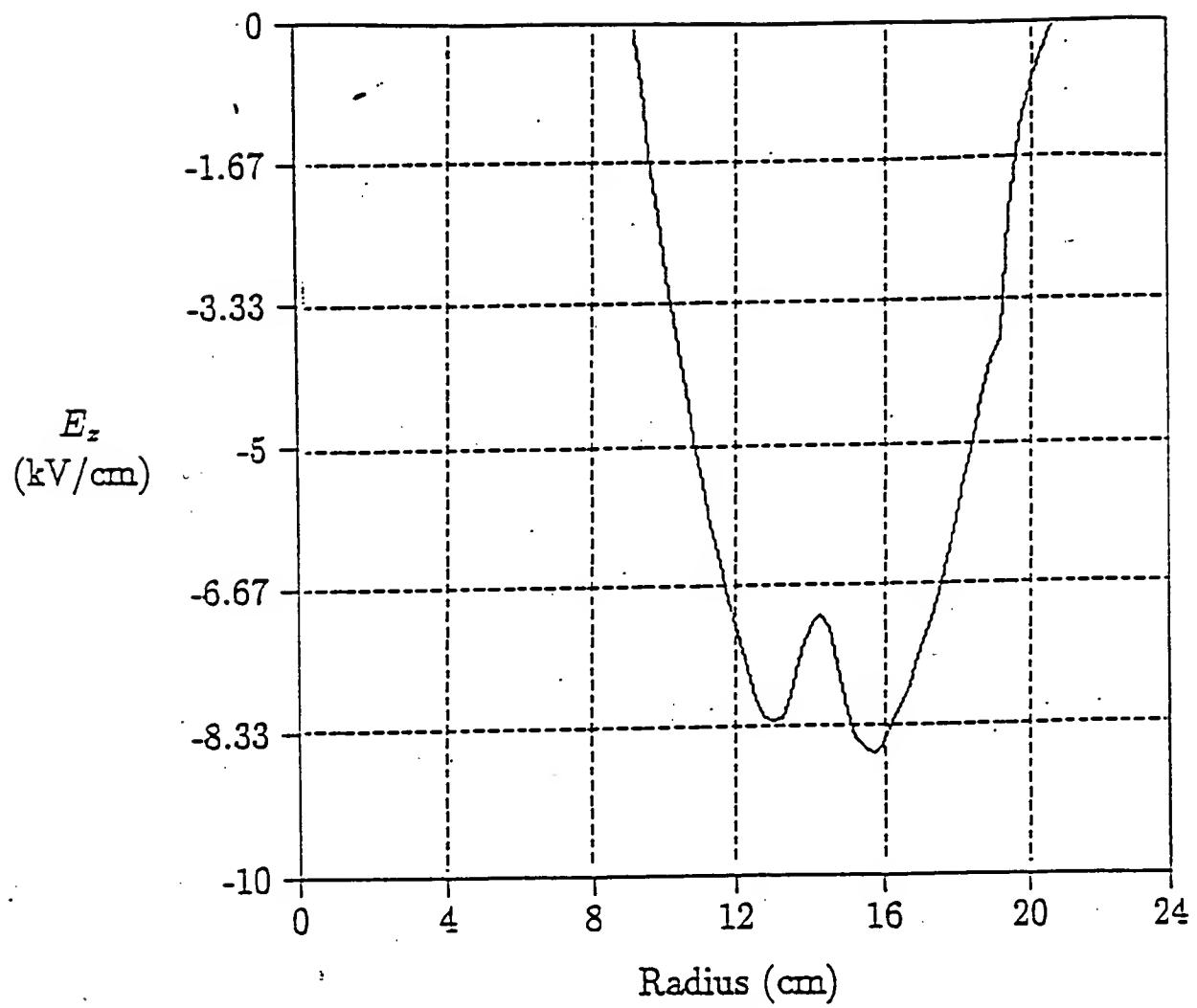


FIGURE 25

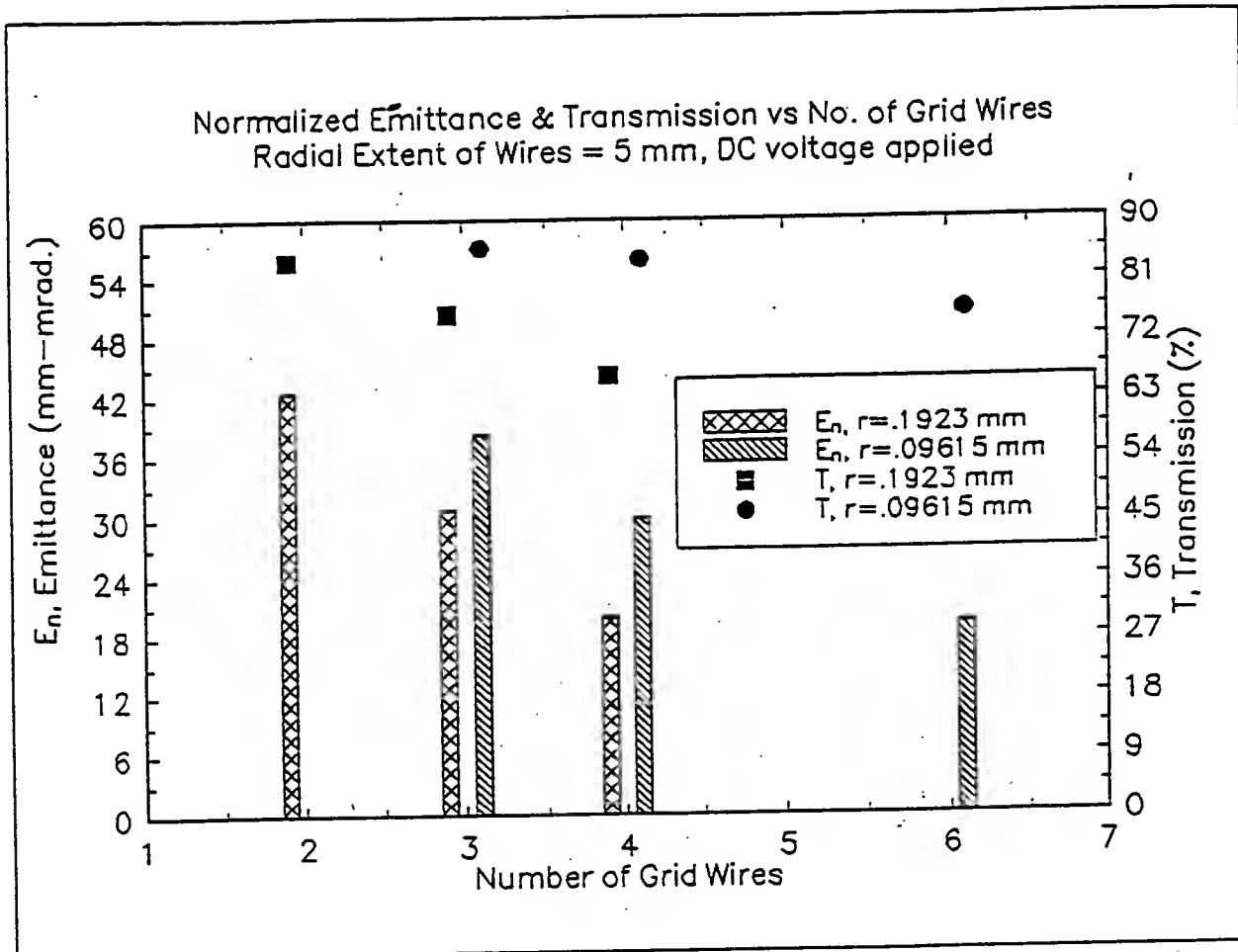


FIGURE 26

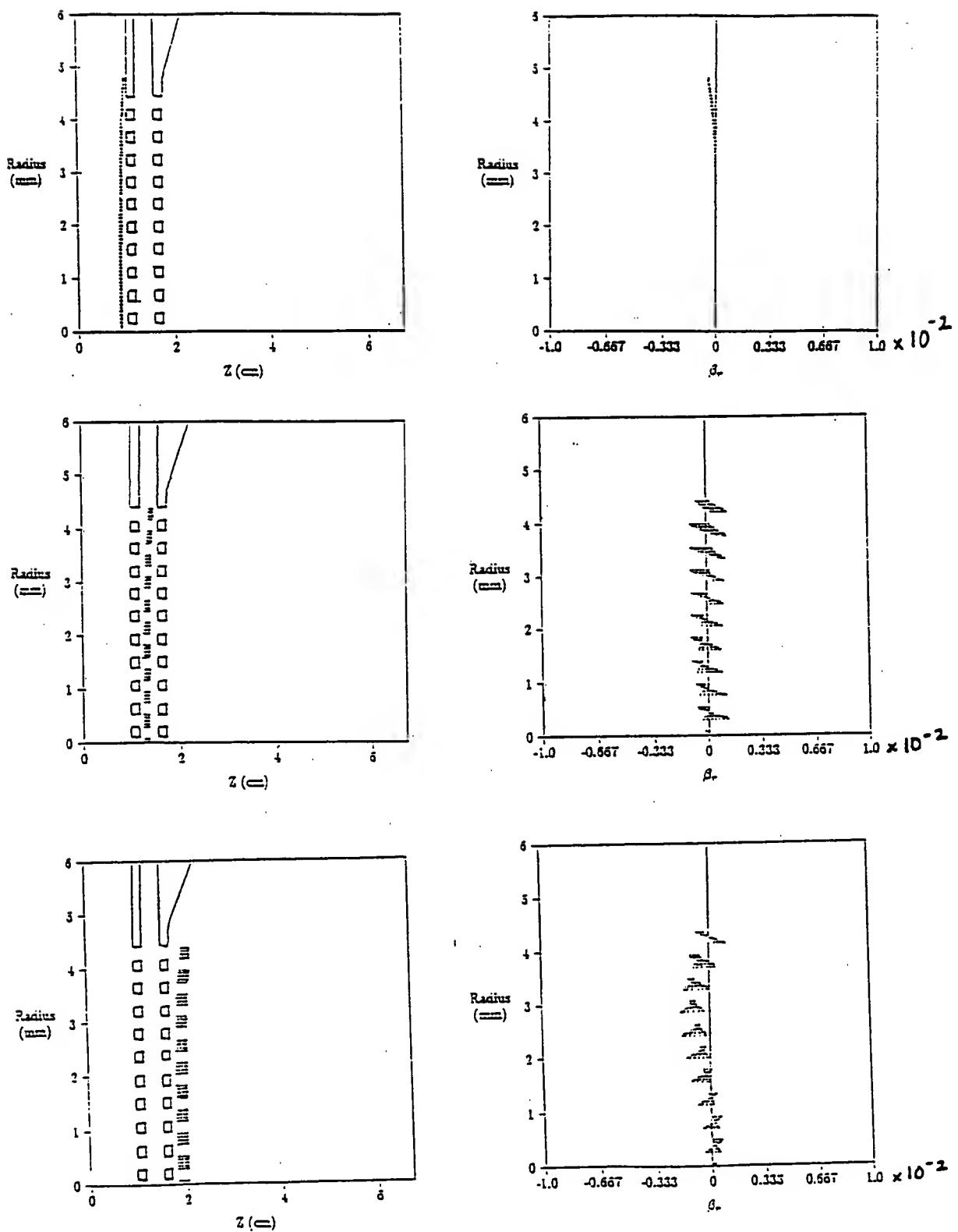


FIGURE 27

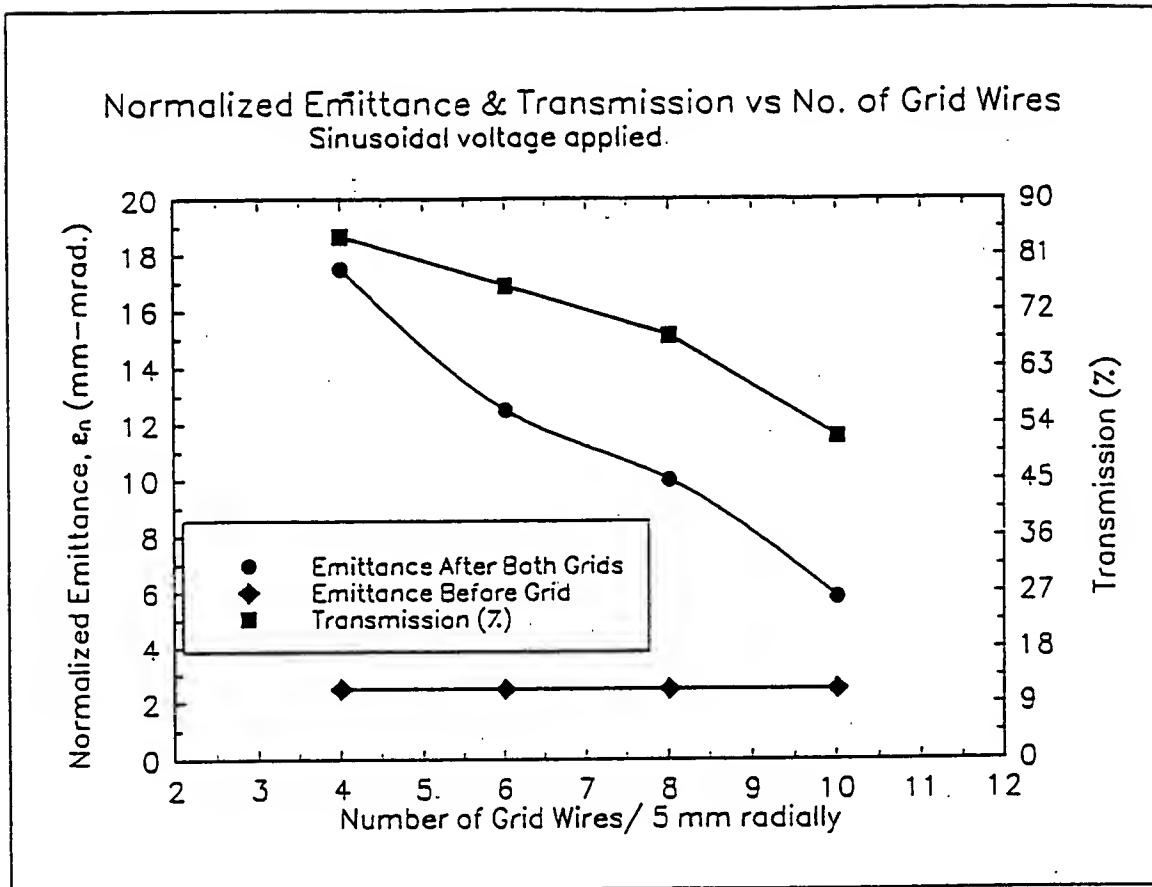


FIGURE 28

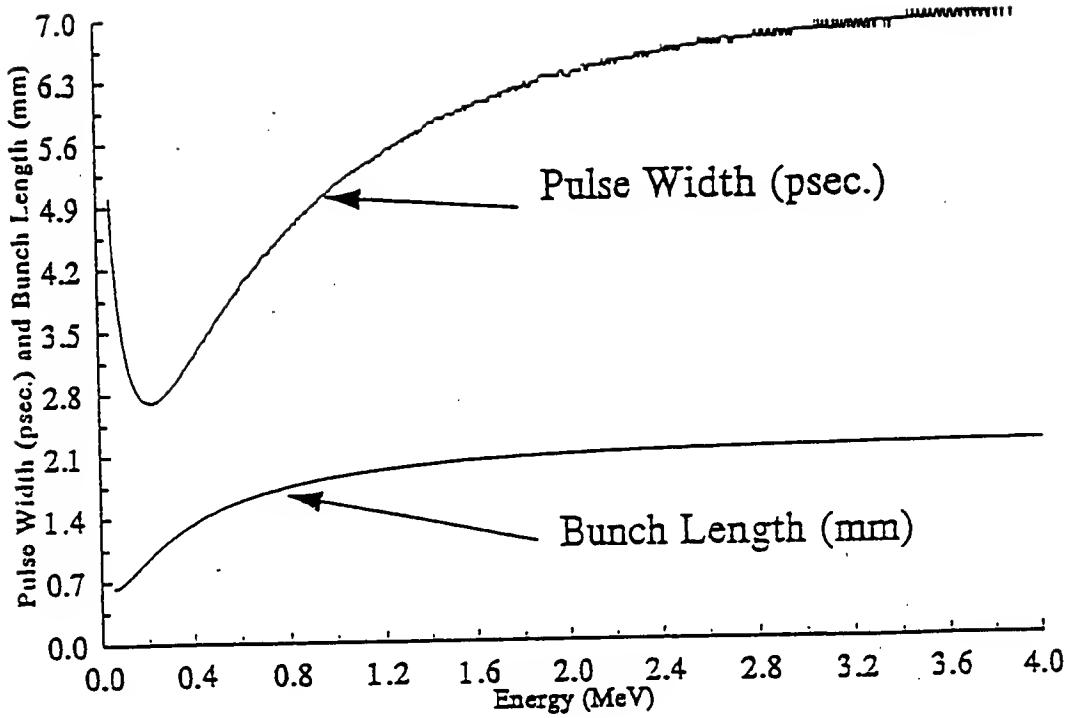


FIGURE 29

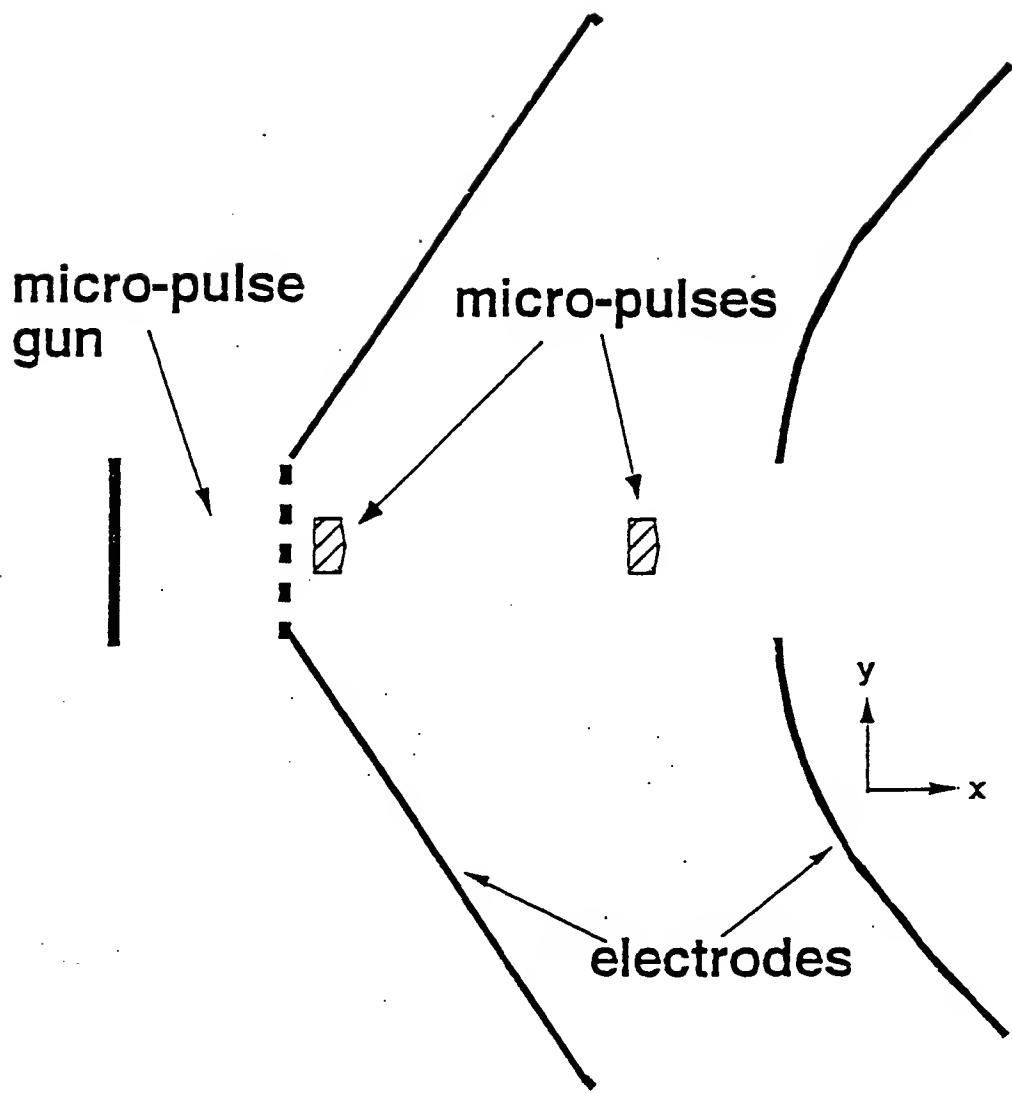


FIGURE 30

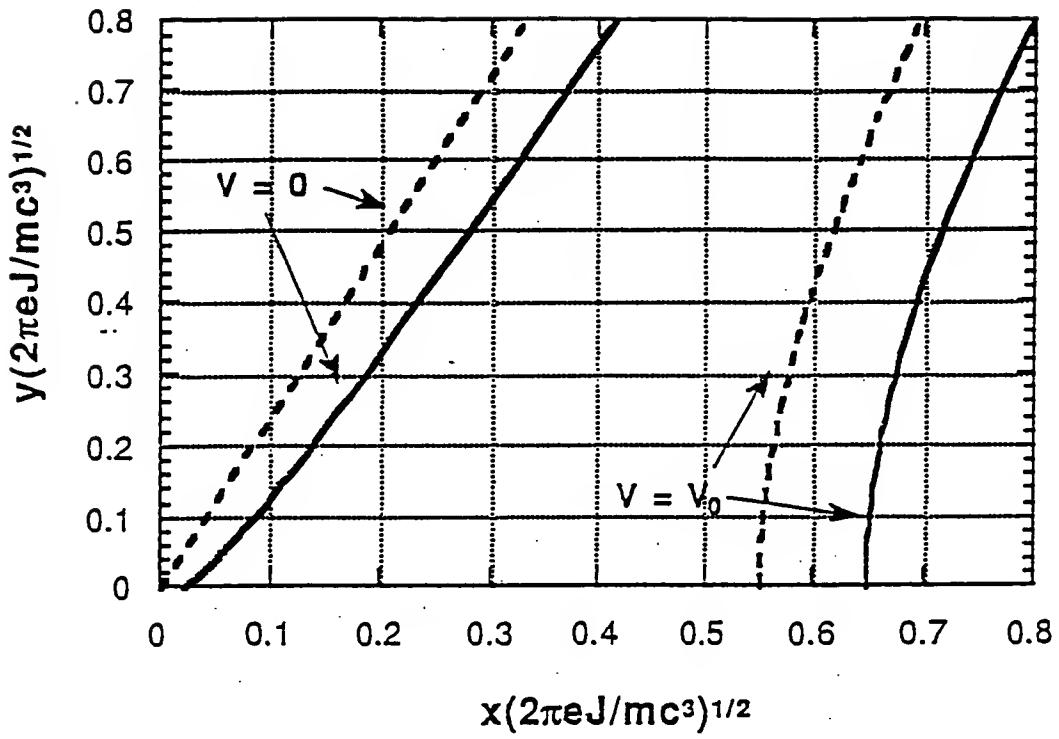


FIGURE 31

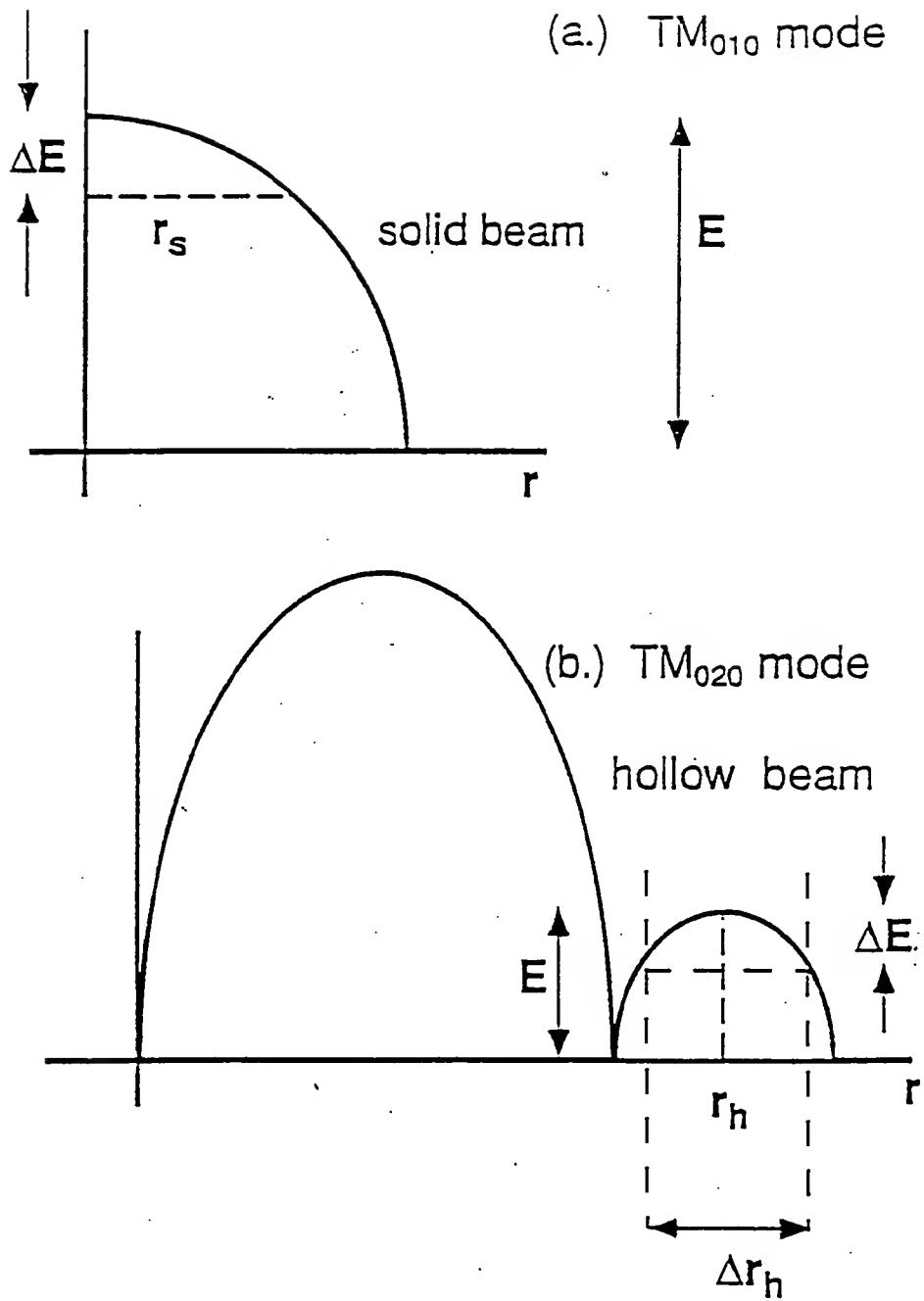
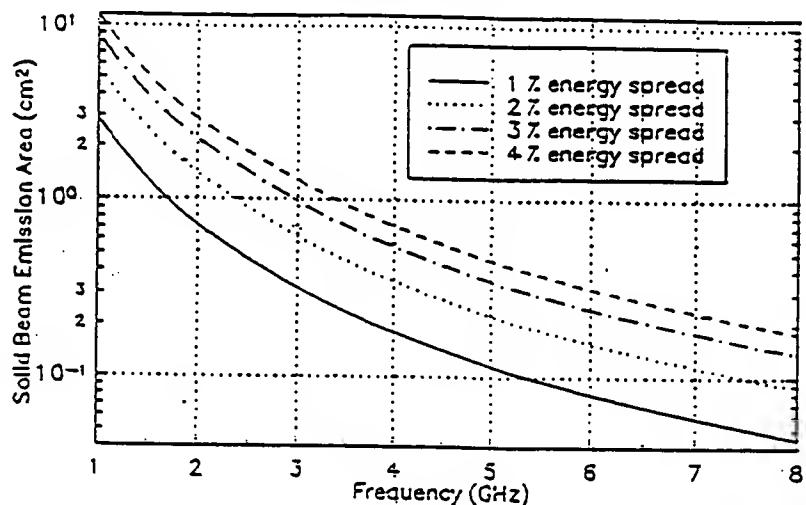


FIGURE 32

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Emission Area vs Frequency for Different Energy Spreads
Solid Beam, TM₀₁₀ Mode



Emission Area vs Frequency for Different Energy Spreads
Solid Beam, TM₀₁₀ Mode

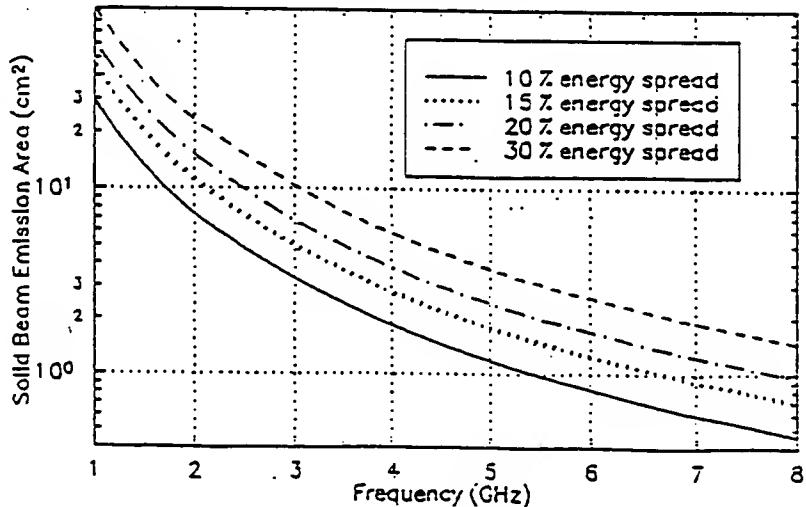
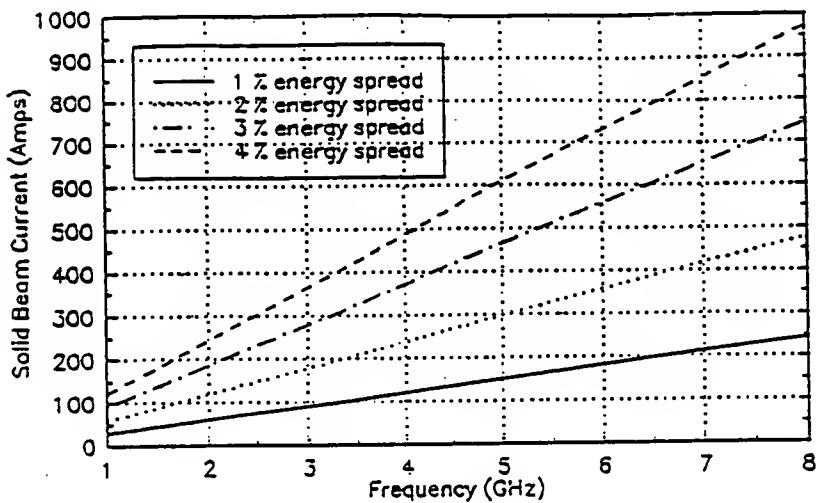


FIGURE 33

Beam Current vs Frequency for Different Energy Spreads
Solid Beam, TM₀₁₀ Mode, $\alpha_s=0.453$, $d=0.5$ cm



Beam Current vs Frequency for Different Energy Spreads
Solid Beam, TM₀₁₀ Mode, $\alpha_s=0.453$, $d=0.5$ cm

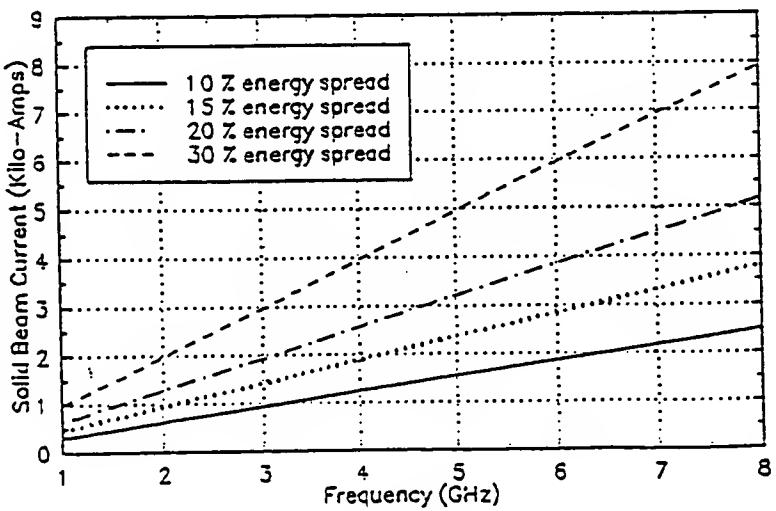


FIGURE 34

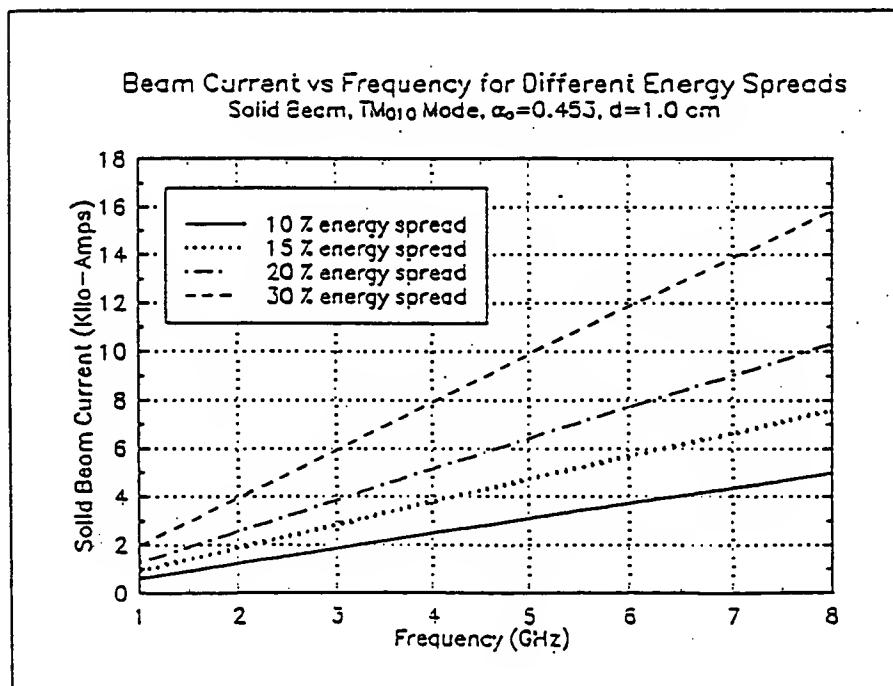
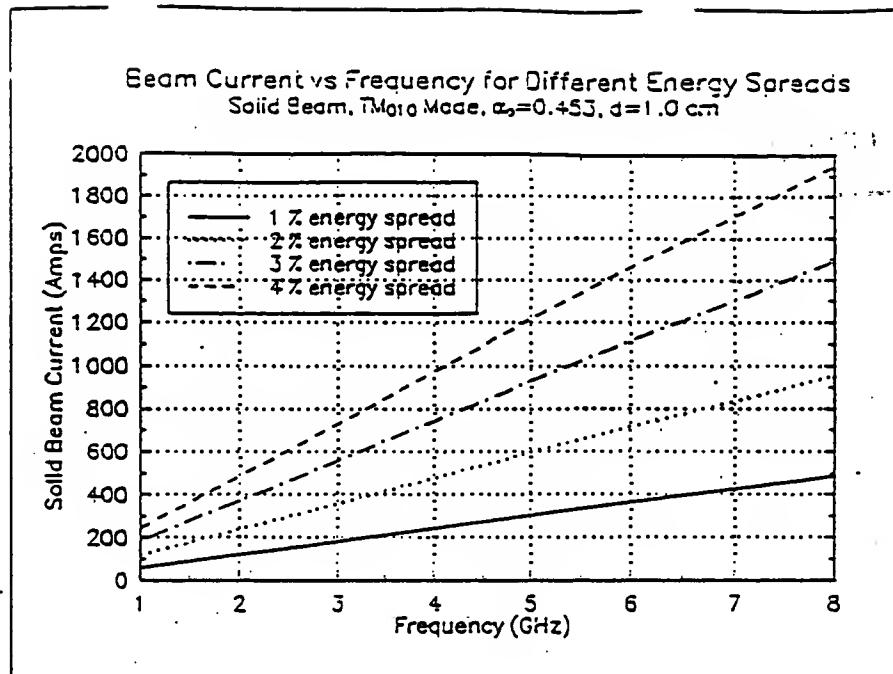


FIGURE 35

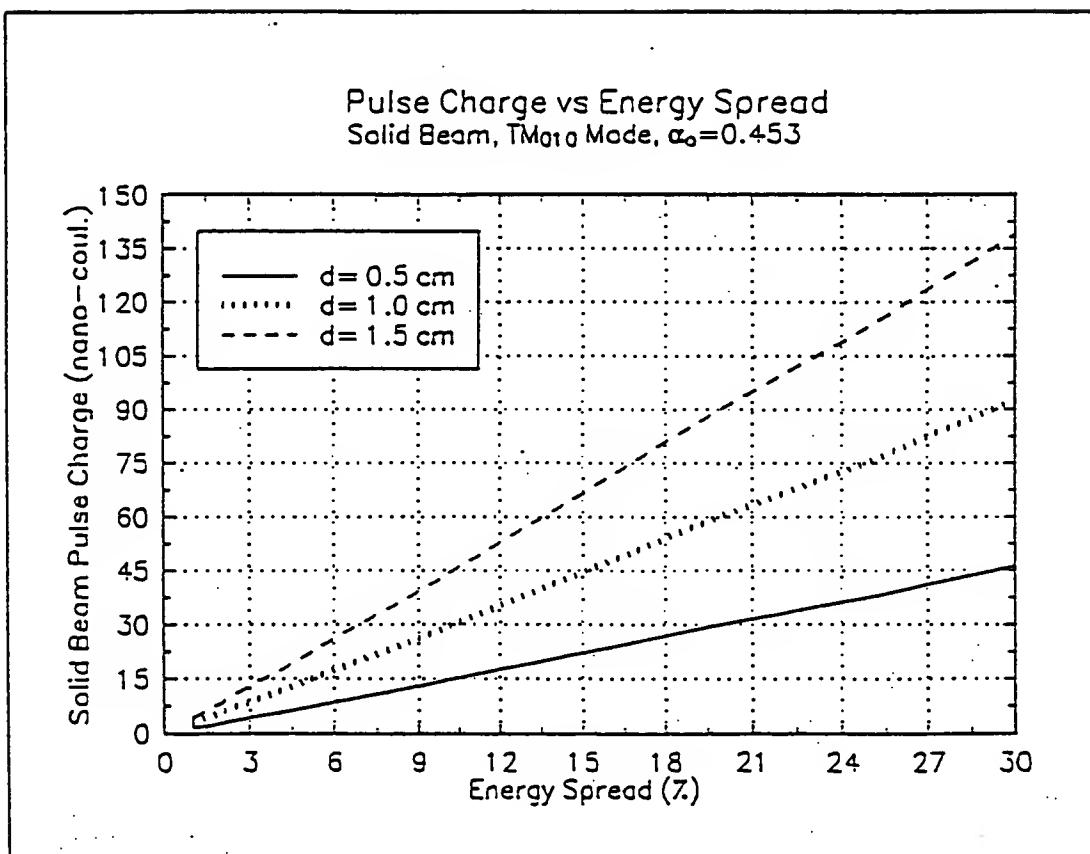


FIGURE 36

2025 RELEASE UNDER E.O. 14176

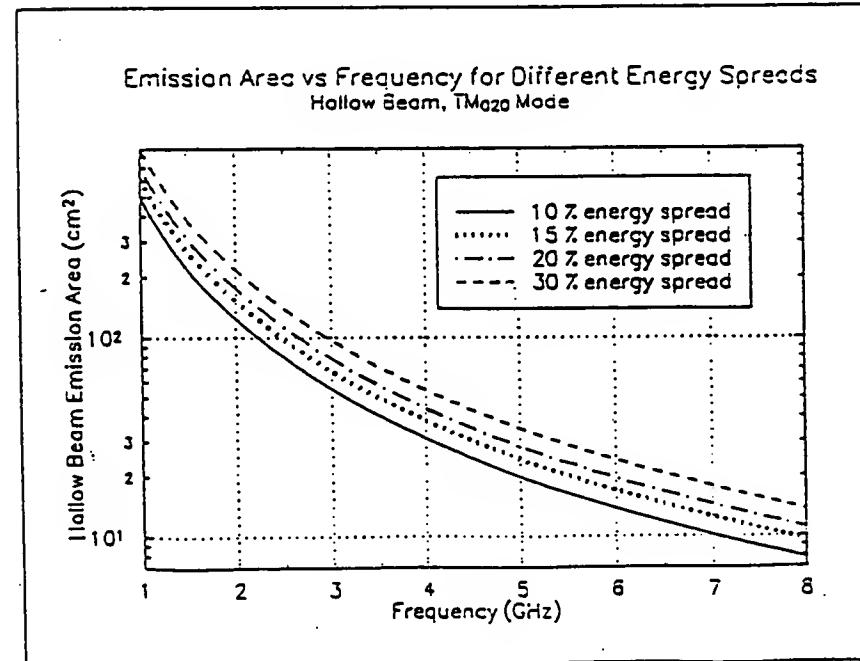
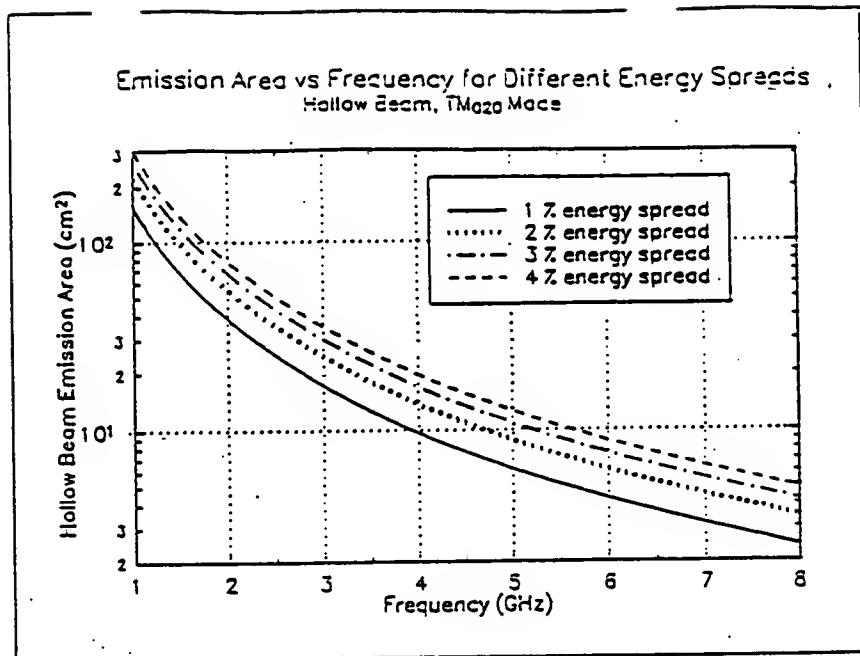


FIGURE 37

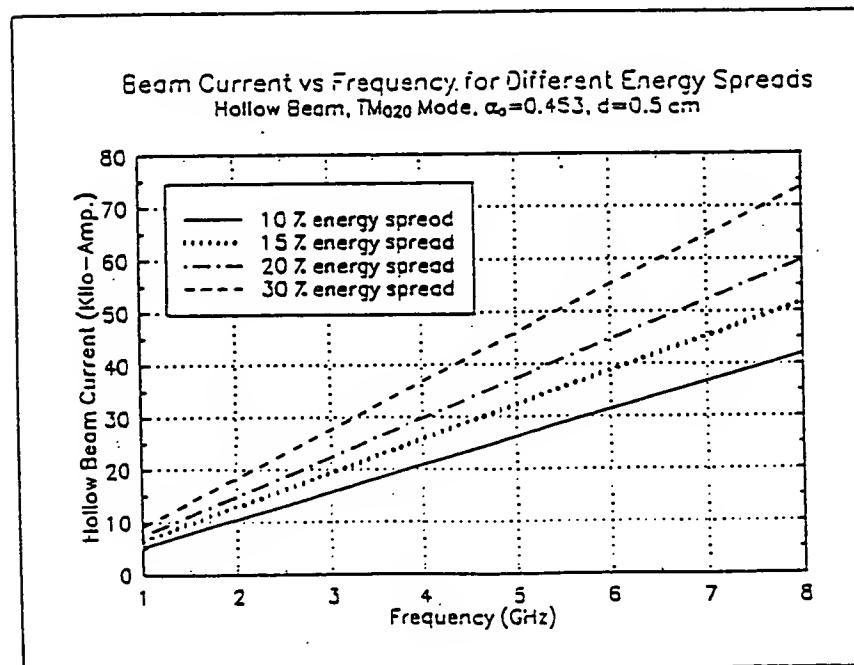
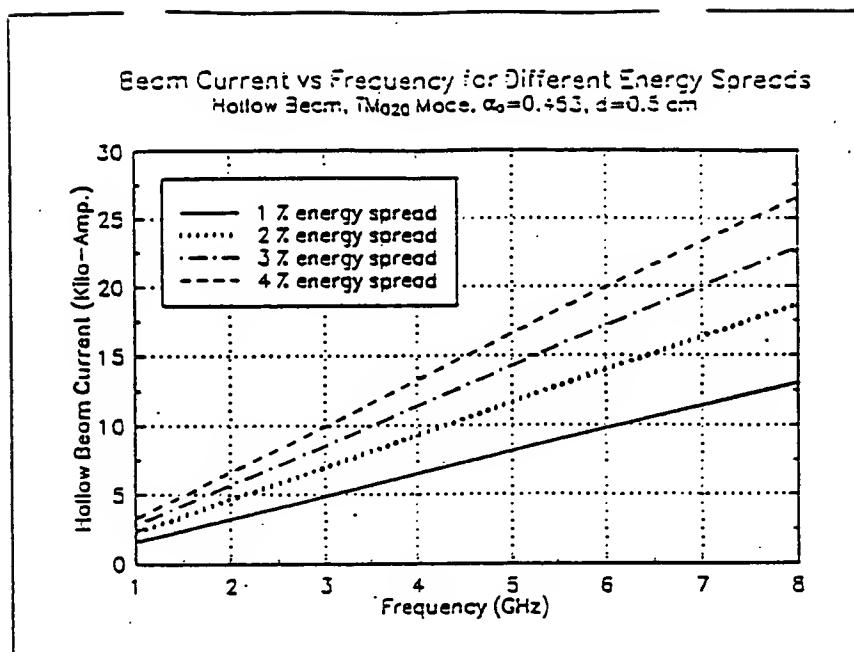


FIGURE 38

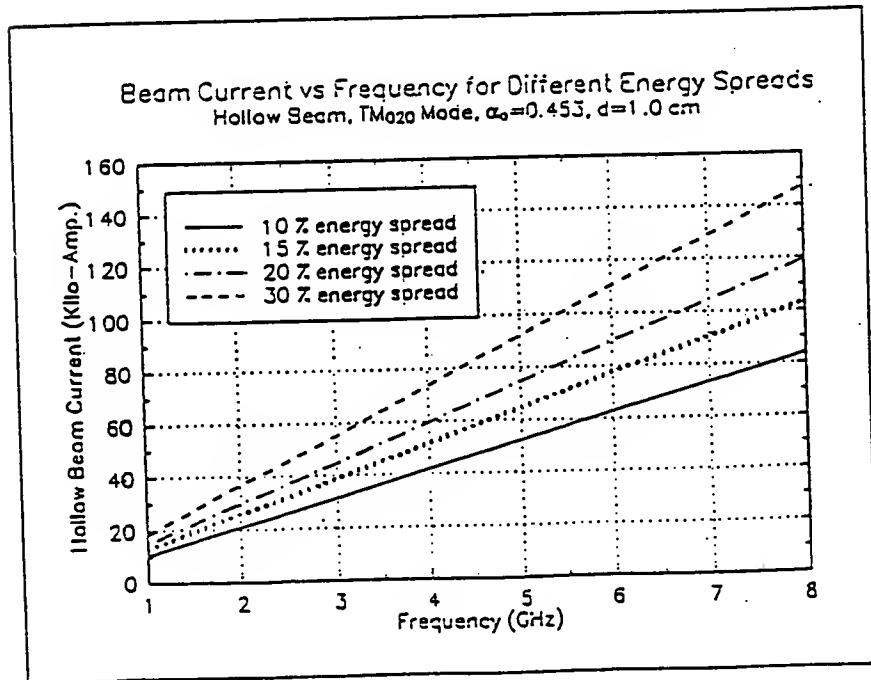
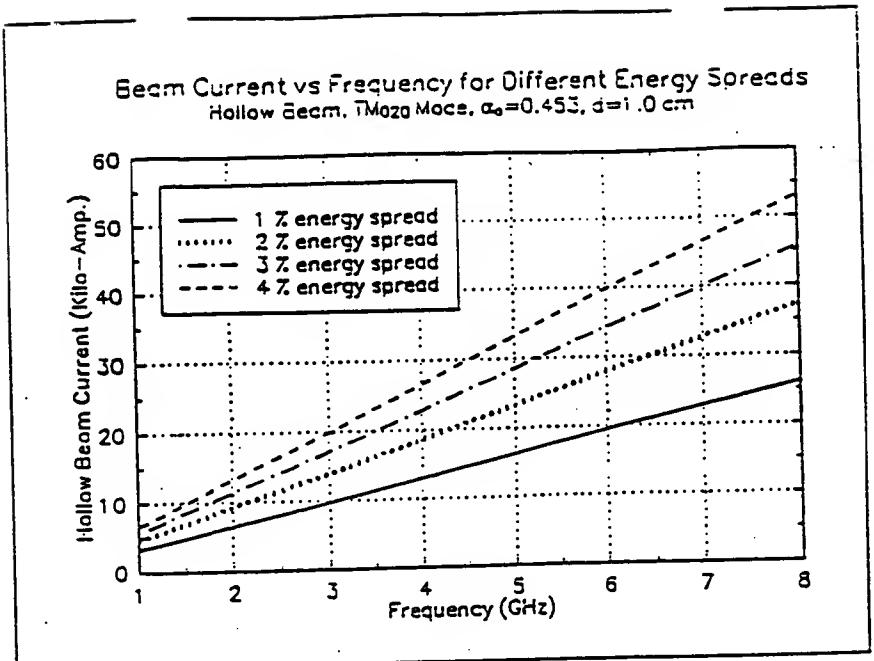


FIGURE 39

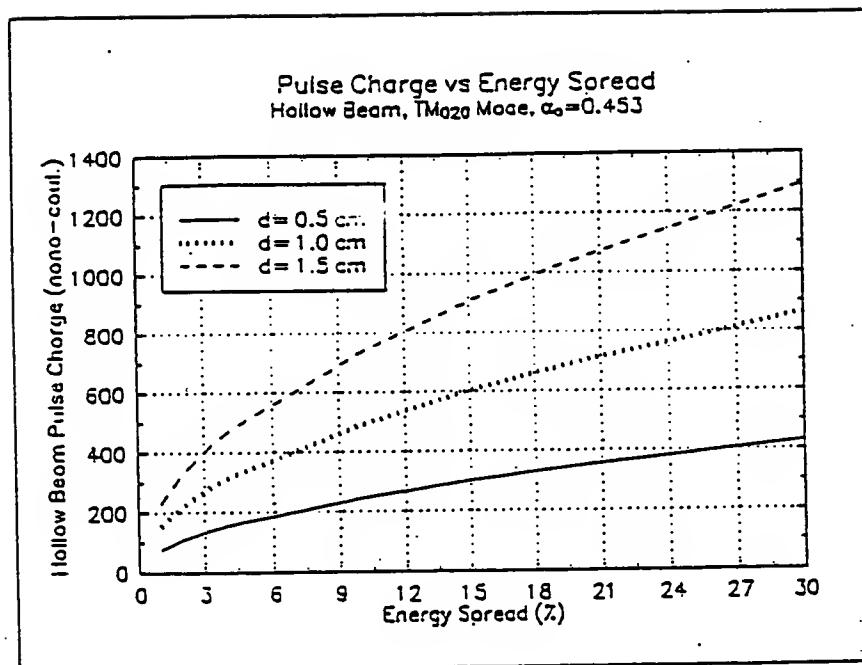


FIGURE 4D

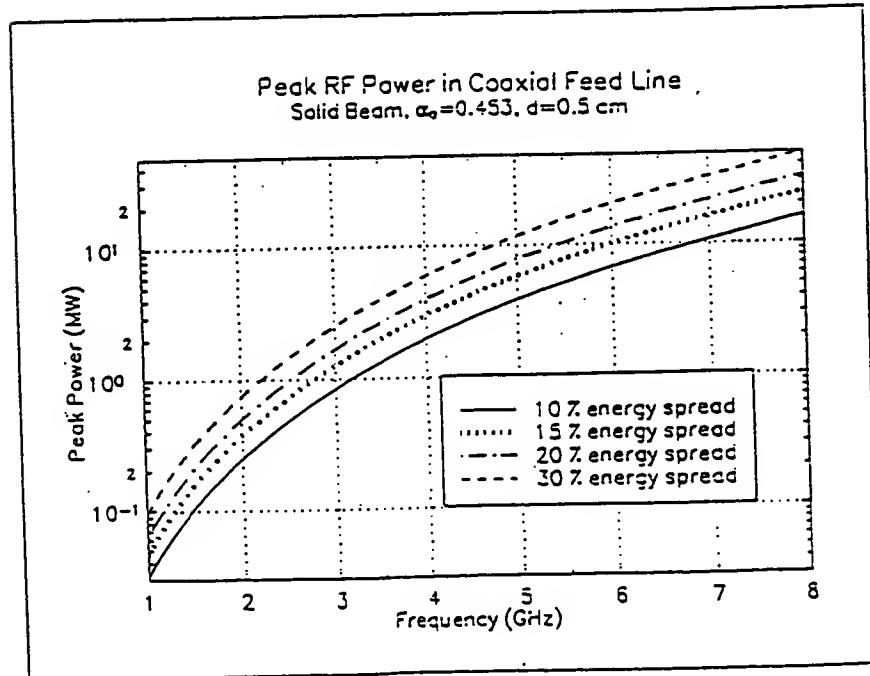
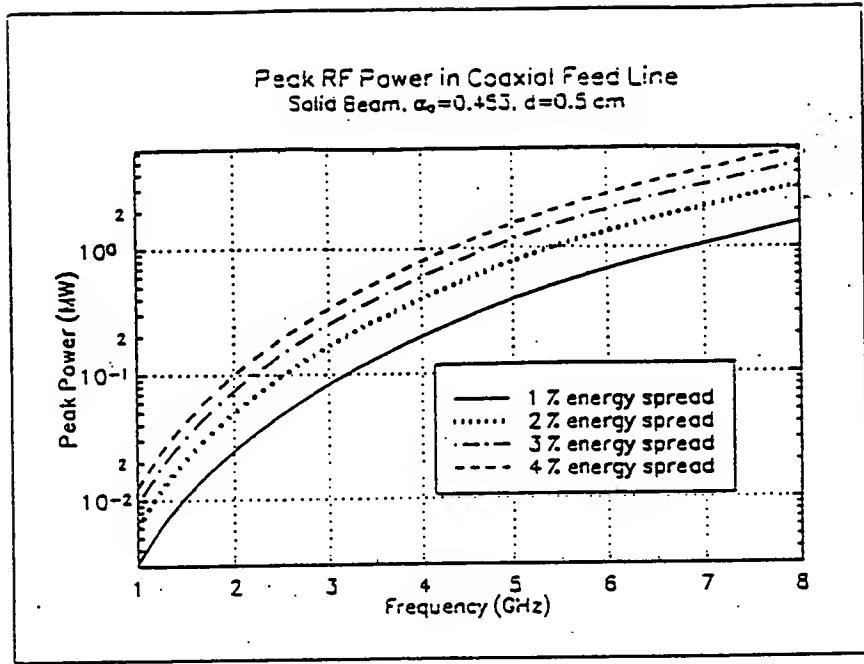


FIGURE 41

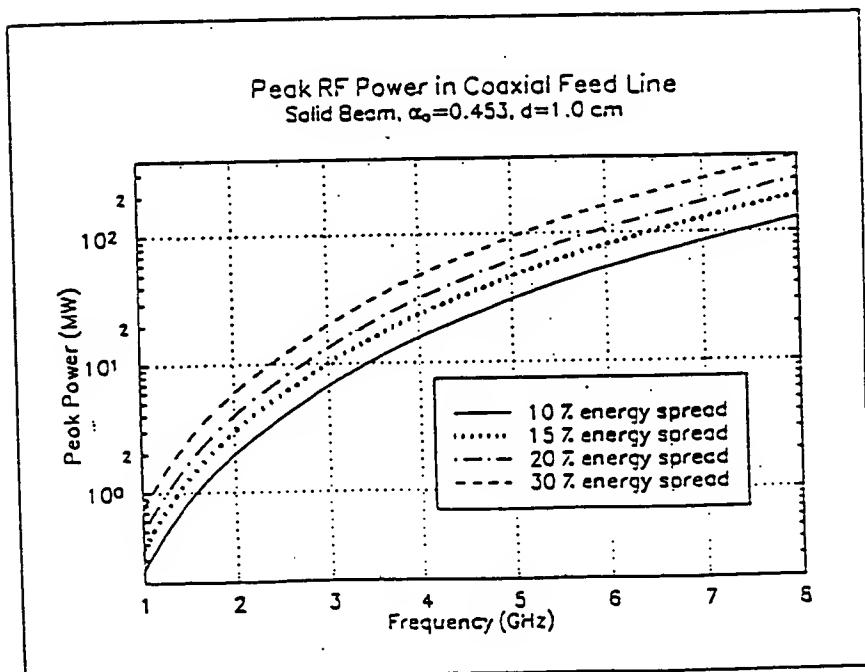
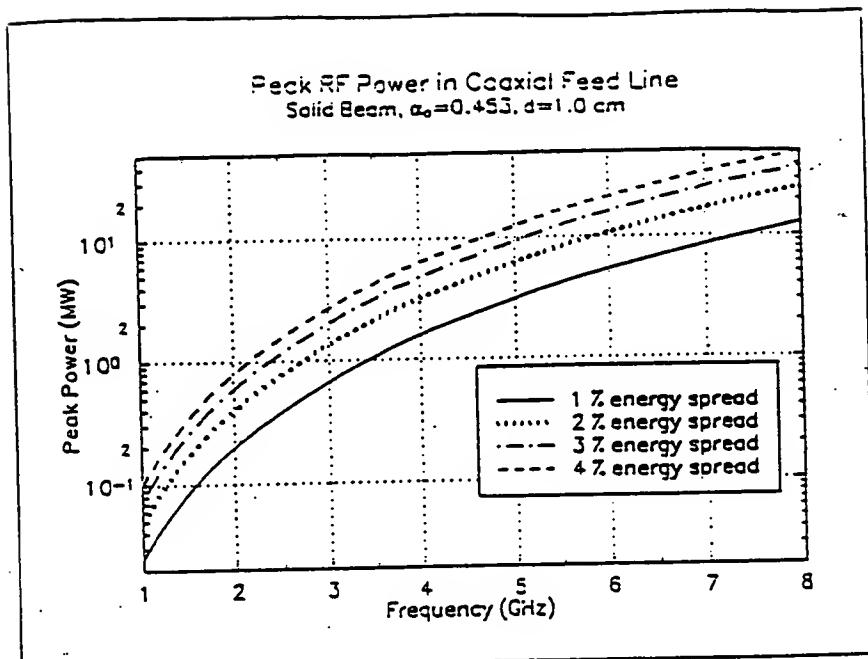


FIGURE 42

2025 RELEASE UNDER E.O. 14176

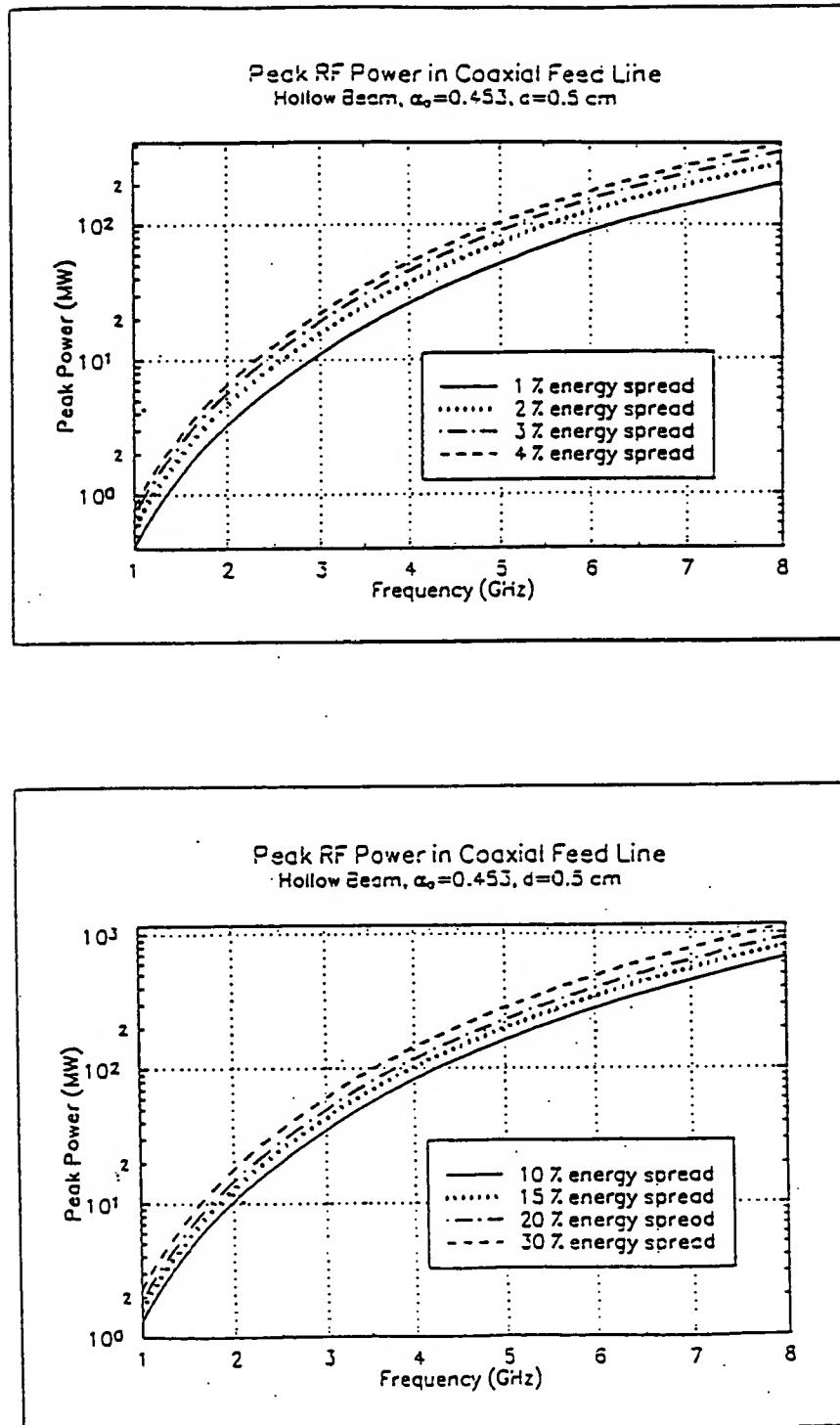


FIGURE 43

205000-22056660

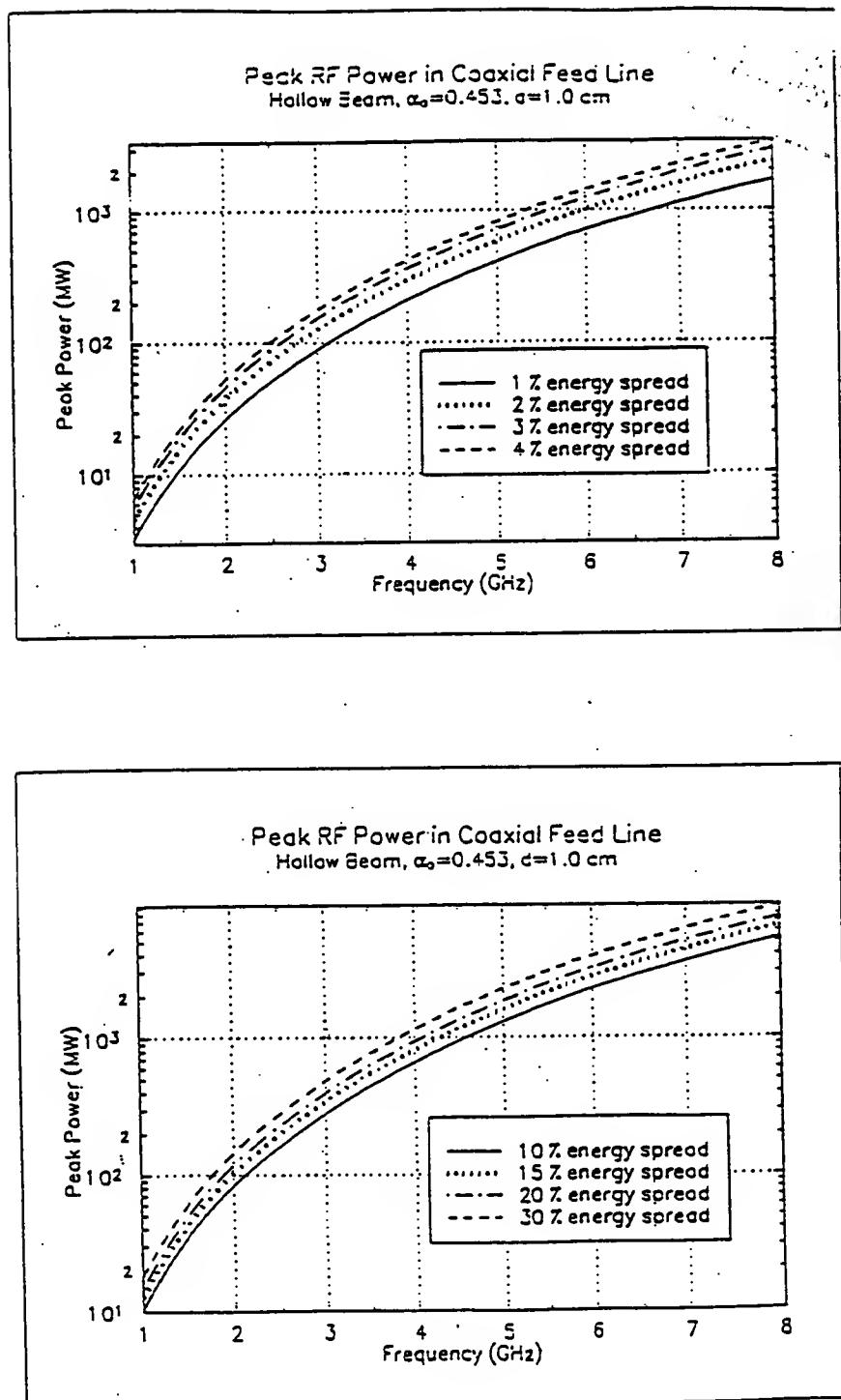


FIGURE 44

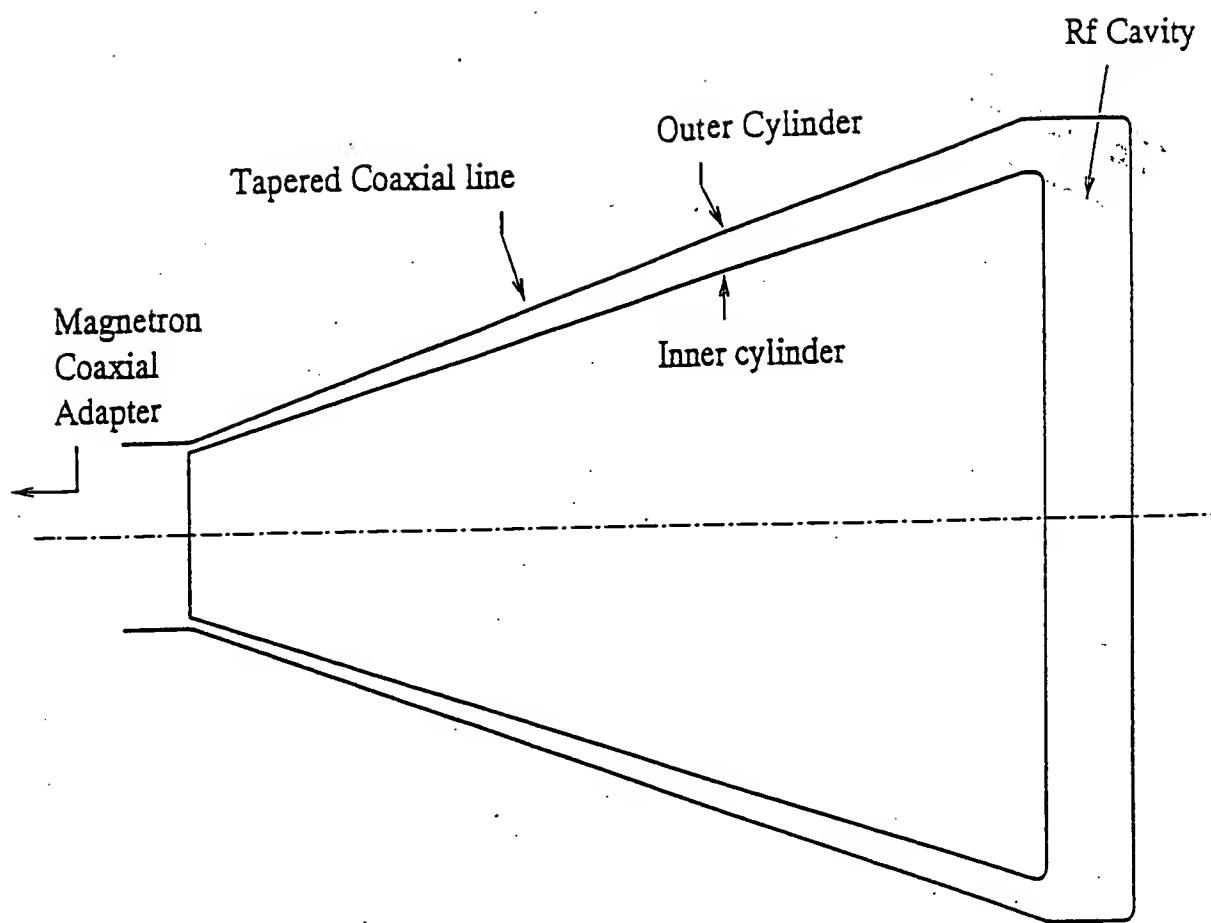


FIGURE 45

RF cavity
(side view)

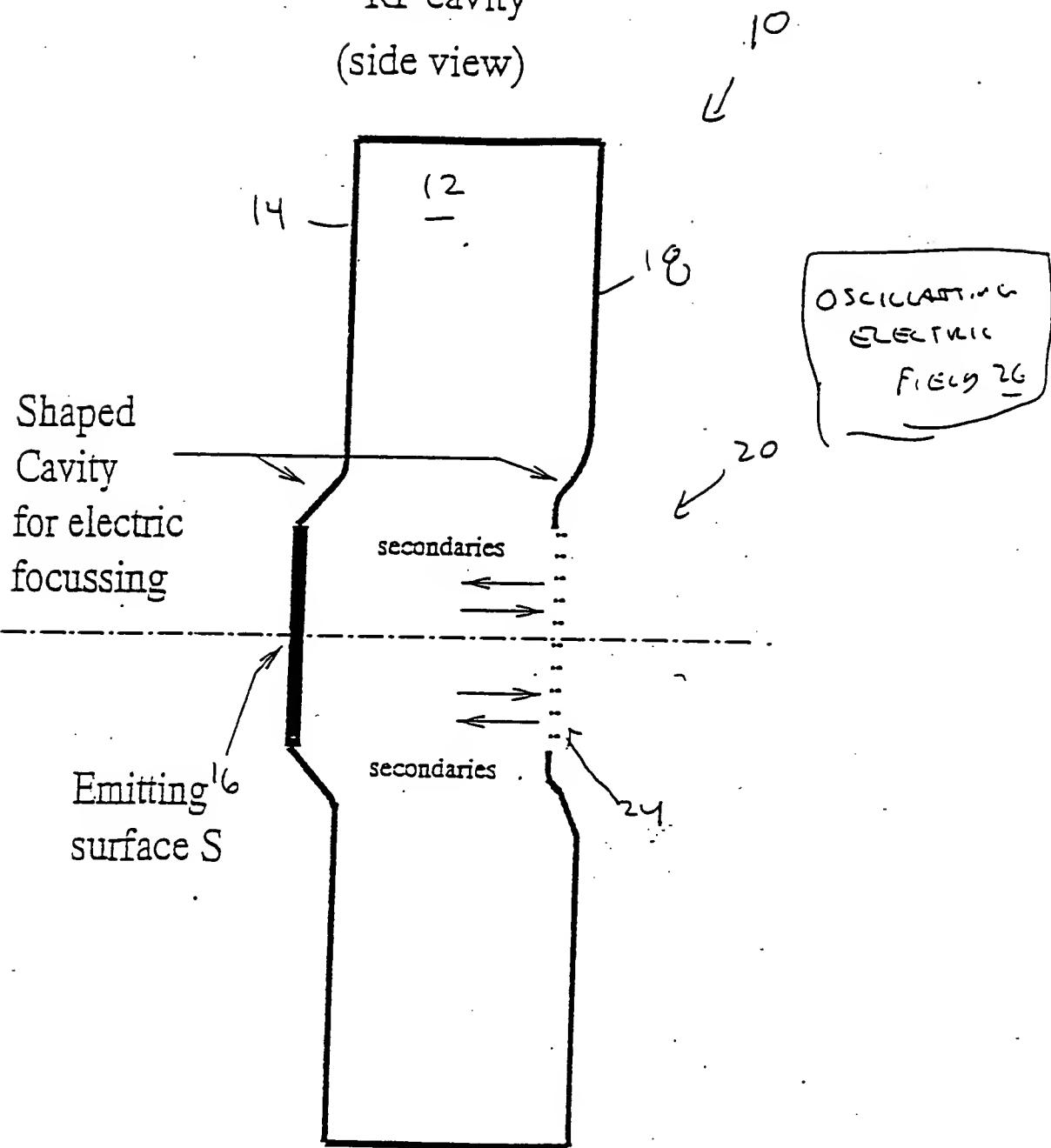


FIGURE 46